

Specialty Crop Block Grant Program—Farm Bill

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Minnesota Department of Agriculture

Agricultural Marketing and Development Division

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2016 FINAL Report for Federal Fiscal Year 2013 Projects

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Project 1

MN Specialty Crop Block Grant – Federal Fiscal Year 13 FINAL Report

Submitted by: Michele Schermann

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Date: June 1, 2016

PROJECT TITLE

1. GAPs Workshops and Technical Assistance for Specialty Crop Growers

PROJECT SUMMARY

2. Provide a background for the initial purpose of the project, which includes the specific issue, problem, or need that was addressed by this project.

Background

Farmers in Minnesota grow and sell most, if not all, of the top five produce items implicated as sources of foodborne illness: leafy greens, tomatoes, cantaloupes, green onions, and berries. Sources of produce contamination are varied, and contamination can occur anywhere along the supply chain, from pre-planting, to pre-harvest and storage, to post-harvest and storage, and to transportation and market. Many varying factors can affect food safety on farms. The Food Safety Modernization Act (FSMA) and Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption

The purpose of this project was to improve the GAPs knowledge and food safety practices of Minnesota fruit and vegetable growers. Improved GAPs are critical to maintain the competitiveness of Minnesota's specialty crop industry and protect the food supply from unintended contamination. Worker health and hygiene practices, use and storage of manure, wash water sanitation practices, equipment, building, tools, and surface cleanliness, and irrigation water sources are issues that give the "biggest bang for the buck" in terms of preventing foodborne illness-related outbreaks.

3. *Establish the motivation for this project by presenting the importance and timeliness of the project.*

The Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption (Produce Safety Rule) was published in November 2015 after a delay of almost two years. Prior to publication growers were stated needing more information about exemptions and coverage, third-party audits, and specific practices they might need to adopt or adjust.

Most fruit and vegetable farmers in Minnesota are small-scale and diversified and sell through farmers' markets. While many Minnesota fruit and vegetable farms are likely currently exempt from FSMA based on size and direct to consumer sales, many farms are interested in selling to wholesale markets and scaling up their operations, and may be covered soon. These farms need FSMA guidance and materials that are tailored to their needs.

Commercial buyers such as food hubs, schools, wholesale distributors and restaurants are increasingly interested in buying from farmers who practice GAPs and who have created a documented food safety plan. Some of these buyers are beginning to require a 3rd party audit to verify these practices, especially wholesale produce distribution companies. As farmers are beginning to sell to institutions and non-"qualified end users", they have learned they are now covered and need to be in compliance with FSMA guidelines.

4. *If the project built on a previously funded project with the SCBGP or SCBGP-FB describe how this project complimented and enhanced previously completed work.*

This project built on previously funded SCBG projects in assisting Minnesota produce growers with GAPs on their farms. We continued to use in-person workshops and site visits but recognize that people don't always have the resources or schedule to attend a workshop and we have expanded on the previous projects by offering scholarships to the attend Cornell University's online GAPs course. We have enhanced this current iteration of the project with the addition of utilizing peer mentors trained in previous years and providing higher level consulting services to growers who were expanding from small farm to medium sized farm. Additionally, we edit and update our teaching materials and methods of delivery based on feedback and need.

PROJECT APPROACH

5. *Briefly summarize activities performed and tasks performed during the grant period. Whenever possible, describe the work accomplished in both quantitative and qualitative terms. Include the significant results, accomplishments, conclusions and recommendations. Include favorable or unusual developments.*

Workshops Held

5 day-long workshops were held in different regions of the state (n=90 attendees).

4 half-day workshops were held for non-traditional growers, e.g. immigrant and refugee farmers, food hub farmer-suppliers, and farmers' market farmers (n=54 attendees).

2 workshops were cancelled due to low enrollment.

Day-long GAPs workshops

April 2014 – Fergus Falls, (n=33)

June 2014 – Whitewater Farm, Altura MN (n=12)

August 2014 – Lakefield, MN (n=13)

November 2014 – Minneapolis UROC (n=15)

June 2015 – Anderson Truck Farm, Lake Crystal MN (n=12)

August 2015 – Loon Organics, Hutchinson Minnesota (n=5)

August 2015 – Catholic Worker Farm, Lake City Minnesota – not held, no registrations

August 2015 – Hoffbauer Farm, Duluth Minnesota – not held, no registrations

Shorter or single topic mini-workshops

These are workshops requested by organizations or groups and fit within the overall Good Agricultural Practices work of this project but were not day-long workshops.

May 2015 – Bagley Farmers Market. Basics of food safety for market farmers. (n=9)

May 2015 – Immigrant Farmer Training Program at MFA. GAPs for Growing in MN. (n=16)

June 2015 – HECUA/Gandhi Mahal Urban Farm. Food Safety in the Urban Garden. (n=7).

June 2015 – Food Safety Plan Writing Workshop for Hub Providers. (n=16).

August 2015 – Food Safety Writing meeting for Amish farmers (n=6)

Peer Mentors

(Yr 1 2014) Four specialty crop farmers were recruited to be food safety mentors. Locations: SE (near Lake City), SW (near Worthington), Central (near St. Cloud), and NW (near Fergus Falls). All mentors participated in three week Cornell University Produce Safety online course and were reimbursed the \$190 class fee. All farmers were invited to conduct three food safety visits with neighboring farms, but could do more if desired (farmers paid \$100 for each visit they conduct).

(Yr 2 2015) After attending a workshop and participating in the Cornell online GAPs class, farmers conducted a food safety walk-through with neighboring farm to offer food safety technical assistance and suggestions for improvements. All mentor farmers were mailed folders with materials to use to conduct food safety walk-throughs. Folders included: intro letter to use to describe program and goals, farm food safety checklist (from Cornell University), printed color fact sheets, worker training DVD, and a jump drive pre-loaded with the food safety plan template. Also included a short form to fill out to summarize the walk-throughs for reporting. Educational materials, DVD and jump drives were left with the farmers receiving walk-throughs.

Three farmer mentors gathered for a project evaluation and sharing meeting in December 2015 in St. Paul. The farmers shared experiences, evaluated what worked and what didn't, and offered suggestions for improved food safety education efforts. Mentors reported that they liked receiving and sharing information, but recruiting farmers to have someone (even a friend) come to their farm and talk about food safety was difficult. They said that farmers are very suspicious of government, and thought that they would be on a "list" by having the walk-through. However, some were very happy to have the assistance and very grateful. Overall the mentor program was successful and helped our program reach farmers that we would not have likely reached otherwise, but we will not continue it in this form in the next project iteration.

Total TA: Three mentor farmers completed eight food safety walk-throughs with specialty crop farmers around the state.

Food Safety/HACCP Experts

Two food safety/HACCP consultants, Mr. Algirdas Vosylius and Mr. Chris Fields visited two specialty crop farms and three aggregation hubs to provide additional higher level guidance and support to a number of growers who were scaling up their operation to sell wholesale.

Description of TA: Visits provided TA and suggestions regarding best practices for food safety, good handling practices, processing and value added, boxes and packaging, food security and traceability for larger farms and food hubs. This work focused on operations that worked with multiple specialty crop farms and one farm that is installing on-farm value added capacity to process vegetables. At the food hubs, consultants travelled along on a delivery route, watching product as it was picked up from farm and brought to facility, and finished product as it was delivered to customers. They observed and made suggestions for product intake, processing, packing and storage for both hubs. They interviewed the managers/owners of hubs, answered questions and compiled a list of recommended actions. At the farm locations each spoke at length with farmers (4 hour visits) and made suggestions for planned value-added facility on farms.

Final reports to clients included USDA and Extension informative briefs and manuals for more information and detailed data. Consultants provided detailed product flow diagrams and suggestions to improve product flow to minimize contamination and improve efficiency. Total number of farmers reached via this TA: 45. Locations: Mankato (Minnesota Valley Action Council food hub), Fergus Falls (Fresh Connect food hub), Seed to Seed Farm, Starbuck (farm installing value added on-farm processing), St. Paul (Stone's Throw Farmer Co-op).

Hubs and farmers were very happy with the TA and indicate that this help has been instrumental in their planning process as they develop traceability programs and systems to meet the demands of their institutional and wholesale buyers. All plan to expand next year, and having this advice now has been very helpful.

Total Expert Visit: Combined, Mr. Fields and Mr. Vosylius consulted with 5 businesses which represented 45 growers.

Educational Materials

We refined our materials instead of reinventing new materials. Because the Produce Safety Rule was delayed by almost 2 years, we continued to use a flash drive to disseminate materials at workshops. Flash drive reprinting is less expensive than using paper and can be changed relatively quickly. As FSMA materials were added to the FDA website we included the most relevant pieces on the flash drive as well as adding other science-based documents from other government or educational sources. Over 200 flash drives were given or mailed out during the course of this project.

Workshop materials in the past have always been stuffed individually in folders and handed out at each workshop. We found that growers were also interested in the summary information from the Cornell University Food Safety Decision Trees. After hearing from the mentors and farmers at workshops, in year 2 we decided to compile all our GAPs factsheets, one-pagers, including the nationally designed and science-based Cornell University Food Safety Decision Trees (Schermann was a co-author) into one GAPs *Manual for Minnesota Farmers*. Using professional services funds, we paid public health and communications consultant Patricia Ohmans to organize the materials and create a seamless and polished manual. This tool is now printed in black and white with a color cover and handed out at

workshops as well as available online. Farmers appreciate having all the information in one easy to access location. Many have told us that they have bookmarked the GAPs Manual on their computers.

Technical assistance

Workshops take the most intense work, but it's the day to day technical assistance allows our program to have a large impact over the entire project period. We reviewed food safety plans, we attended meetings with other grower partner organizations to make sure we keep our face at the table and remind grower groups that food safety is a priority for a successful grower, we have answered hundreds of phone calls and emails over the course of this project.

6. *Present the significant contributions and role of project partners in the project.*

Schermann and Hultberg are responsible for the work of the project but rely heavily on partners and supporters. Cindy Tong is available to collaborate on the science of our work and be available for discussions about the details of the produce safety rule versions and how it will affect Minnesota specialty crop growers, specifically with water and soil amendment potential rule changes, packaging choices and pathogens, and overlapping concerns in food safety and post-harvest handling.

Kathy Zeman from the Minnesota Farmers Market Association (MFMA) is our industry partner and helps with promotion of our workshops and materials and has become an advocate of farm food safety training for market managers to encourage for market vendors. Zeman is also a farmer and an active member of the Local Foods Advisory Group. She is well known around Minnesota and helps get our message out throughout her connections. Our relationship with Zeman has expanded to other members of MFMA and with MFMA we have expanded our partnership.

Other informal project partners for promotion, review, and networking include Sustainable Farming Association (SFA), University of Minnesota Extension (Extension), Minneapolis Public Schools (MPS), Lakes Area Cooperative Service Area (LACS), Regional Sustainable Development Partnerships (RSDP), Farmers Legal Action Group (FLAG), Minnesota Food Association (MFA), and Hmong American Partnership (HAP).

GOALS AND OUTCOMES ACHIEVED

7. *Supply the activities that were completed in order to achieve the performance goals and measurable outcomes for the project.*

- Workshops Held
- 5 day-long workshops were held in different regions of the state (n=90 attendees).
- 4 half-day workshops were held for non-traditional growers, e.g. immigrant and refugee farmers, food hub farmer-suppliers, and farmers' market farmers (n=54 attendees).
- 2 workshops were cancelled due to low enrollment.
- 3 mentor farmers completed 8 walk-throughs with specialty crop farmers around the state.
- 45 numbers of farmers/farms reached Fields/Algirdas consultations.
- 200+ preloaded flash drives, 40 GAPs Toolkits, 87 "How to build a Handwashing Station" instructions, numerous downloads of the Food Safety Plan Template.
- Documented 231 farmers reached through individual technical assistance via email, phone calls, short visits, and food safety plan reviews.
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- Day-long GAPs workshops
- April 2014 – Fergus Falls, (n=33)
- June 2014 – Whitewater Farm, Altura MN (n=12)
- August 2014 – Lakefield, MN (n=13)
- November 2014 – Minneapolis UROC (n=15)
- June 2015 – Anderson Truck Farm, Lake Crystal MN (n=12)
- August 2015 – Loon Organics, Hutchinson Minnesota (n=5)
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- Shorter or single topic mini-workshops
- These are workshops requested by organizations or groups and fit within the overall Good Agricultural Practices work of this project but were not day-long workshops.
- May 2015 – Bagley Farmers Market. Basics of food safety for market farmers. (n=9)

- May 2015 —Immigrant Farmer Training Program at MFA. GAPs for Growing in MN. (n=16)
- June 2015 – HECUA/Gandhi Mahal Urban Farm. Food Safety in the Urban Garden. (n=7).
- June 2015 —Food Safety Plan Writing Workshop for Hub Providers. (n=16).
- August 2015 —Food Safety Writing meeting for Amish farmers (n=6)
- Producers were also reached through individual contact and we have documented 231 contacts for providing technical assistance, help with food safety plan writing, and answering questions specific to Good Agricultural Practices.
- Evaluation results from the workshops were positive and group mean scores (1 = not confident to 5 = very confident) **increased** in all categories of grower-attendee’s confidence in their ability to write a food safety plan (3.47 to 4.38), conduct a self-audit on their farm (3.43 to 4.48), know where to go to get food safety help (3.67 to 4.48), and answer basic questions about food safety principles to employees on their farm (3.52 to 4.29).

8. *If outcome measures were long term, summarize the progress that has been made towards achievement.*

9. *Provide a comparison of actual accomplishments with the goals established for the reporting period.*

Activity	Goal	Actual
GAPs workshops	8	6 day-long 5 shorter
Technical assistance	25	231
In-depth assistance with food safety consultant	5	5 entities representing 45 growers
Update materials related to FSMA for Minnesota Growers	yes	With rule only published Nov 2105 updated to the proposed rule.
Educational Materials disseminated	350	200 flash drives 40 GAP Toolkits 87 How to Build Handwash Stations 60 other factsheets <hr/> 387
Food Safety Plans Written	20	36 plans have been started. People rarely tell us when they've finished or show us a finished plan; we see the plan when it is in process and needing review.

10. *Clearly convey completion of achieving outcomes by illustrating baseline data that has been gathered to date and showing the progress toward achieving set targets.*
See our goals in table above.

BENEFICIARIES

11. *Provide a description of the groups and other operations that benefited from the completion of this project's accomplishments.*

The primary beneficiaries are specialty crop growers in Minnesota, who now have a greater understanding of on-farm food safety and are more likely to embrace food safety practices on the farm and have food safety plans which may bring them more markets and opportunities to sell their produce. As we worked particularly closely with food hubs to meet their needs and ability to purchase from specialty crop growers, food hubs and aggregators are another primary beneficiary. Other beneficiaries include buyers like food service personnel, restaurant and wholesale distributors who buy from these growers. Consumers like children and others populations who consume local food also benefit from food that is safer. Food produced to minimize microbial contamination decreases the public health risk of a foodborne illness outbreak.

Producer/growers who participated in the workshops (of those who answered this question) sold to a number of outlets and most sold to more than one (range 1-7; average 3.24; median 3). Table 1 shows the distribution of outlets of produce. Beneficiaries are single consumers to institutional distribution systems where grower/producers have attended a GAPs training.

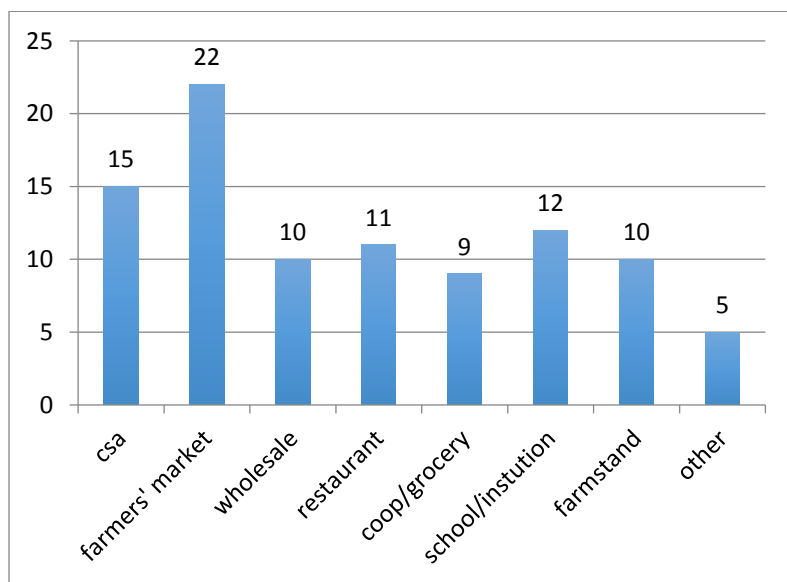


Table 1. Number and types of buyers of produce from Grower/Producers who attended Good Agricultural Practices workshops.

12. *Clearly state the quantitative data that concerns the beneficiaries affected by the project's accomplishments and/or the potential economic impact of the project.*

Evaluation results from the workshops were positive and group mean scores (1 = not confident to 5 = very confident) increased in all categories of grower-attendee's confidence in their ability to write a food safety plan (3.47 to 4.38), conduct a self-audit on their farm (3.43 to 4.48), know where to go to get food safety help (3.67 to 4.48), and answer basic questions about food safety principles to employees on their farm (3.52 to 4.29).

Qualitative evaluation data was requested about course content as well as ideas for other workshops or workshop formats or locations. Again, comments were positive about the content and people suggested more on-farm workshops instead of classroom style or more classroom style instead of on-farm workshops. Practices that people said they would be implementing on their farm were mostly about sanitation, writing SOPs, and revising their washing practices.

LESSONS LEARNED

13. *Offer insights into the lessons learned by the project staff as a result of completing this project. This section is meant to illustrate the positive and negative results and conclusions for the project.*

Food safety continues to be an important part of farm's operations, and will be even more so with the release of the final produce safety rule as a part of FSMA. Project staff have seen an explosion of food hubs, schools, hospitals and distributors in Minnesota who wish to buy directly from specialty crop growers but who have concerns about food safety and either require a GAPs audit or a food safety plan. This project has been successful in helping more farmers to meet the needs of these buyers and enter these new markets.

However, GAPs and on-farm food safety continues to be a "back-burner" issue for many specialty crop growers that sell primarily through farmers markets, roadside stands, food coops or CSA. These farmers may not attend workshops, seek out our help, or write a food safety plan, because no one is "requiring" it. We continue to try to reach these farmers to encourage them to adopt best practices, not because it is "required" but because it is the right thing to do to protect public health and their farm business. In many ways this outreach and recruitment for workshops continues to be the hardest part of this work, especially as farmers are very busy during the growing season, making on-farm workshops difficult. The release of the

Produce Safety Rule may encourage more people to attend a workshop and learn more in the coming years.

14. *Provide unexpected outcomes or results that were an effect of implementing this project.*

The peer mentor farmers really liked getting to know one another, and build a statewide network. Also, workshop attendees like meeting each other and talking about their farms, production questions and other information sharing. The GAPs Manual was a very important development and will be used for many years.

15. *If goals or outcome measures were not achieved, identify and share the lessons learned to help others expedite problem-solving.*

Recruitment for workshop was extremely difficult in Year 2 of this project. Even though farmers requested on-farm workshops, they were too busy to attend a workshop when there was anything to see. We wonder if charging for a workshop might give it more perceived value be seen as a professional development opportunity. We wonder if farmers shouldn't have to take 10 hours of professional development, at least 2 in food safety, every other year.

Some of our best success from partnering with other organizations for recruitment and logistical arrangements. Also community involvement as much as possible such as buying the catered lunch (that attendees paid for) from local businesses that also used the growers produce was important for the host community/farm.

ADDITIONAL INFORMATION

16. *Provide additional information available (i.e. publications, websites, photographs) that is not applicable to any of the prior sections.*

Project 2

MN Specialty Crop Block Grant – Federal Fiscal Year 13 FINAL PERFORMANCE REPORT

Submitted by: Paul Hugunin

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Date: November 30, 2016

PROJECT TITLE

1. *Provide the project's title.*

Market Expansion for Minnesota Grown Specialty Crops

USDA FY'13, MDA Contract #71847, 3(4)10423

PROJECT SUMMARY

2. *Provide a background for the initial purpose of the project, which includes the specific issue, problem, or need that was addressed by this project.*

The initial purpose of the project was to enhance the competitiveness of Minnesota specialty crop producers by addressing these USDA Program Goals:

1. Improving operational efficiency, reducing costs and other barriers, and increasing access to distribution systems and new markets for specialty crops.
2. Increasing the demand-for and supply-of locally produced specialty crops.

The following activities were proposed to address those goals:

1. Build on our previous expertise with pay per click advertising to link consumers with growers via the online Minnesota Grown Directory.
2. Integrate social media and member news and events into the website's home page to enhance growers' connection to consumers.
3. Develop, print and distribute new point of sale materials for specialty crops.
4. Increase consumer awareness of and demand for local specialty crops through television and printed advertisements.

3. *Establish the motivation for this project by presenting the importance and timeliness of the project.*

Consumer demand for locally grown produce is increasing each year. Consumers now want to know where their food comes from, who grows it and they want to proudly (and publicly) demonstrate the ways in which they are supporting the local foods movement. With this increase in demand, specialty crop growers need assistance developing marketing tools that facilitate their connection to these consumers. This project enhances the competitiveness of all Minnesota specialty crop producers by improving marketing efficiency for growers and by making it easy for consumers to locate and purchase from growers.

Much of this project related to utilization of web-based marketing tools such as websites, sponsored search campaigns and social media. These are not typically areas where small to medium size specialty crop growers excel. The role of the Minnesota Grown Program is to utilize its skills and resources to assist these producers by creating awareness of locally grown specialty crops and linking consumers directly with these producers. Not only have consumers shifted their primary source of information to web-based resources, within that category they are changing from fixed location personal computers to mobile devices such as phones and tablets and from traditional news sites to social media programs such as Facebook and Pinterest. These trends were already beginning at the time this project was conceived and the changes accelerated throughout the project implementation phase.

4. *If the project built on a previously funded project with the SCBGP or SCBGP-FB describe how this project complimented and enhanced previously completed work.*

This proposal built on previous SCBG investments that have improved effectiveness of the Minnesota Grown website by increasing traffic to the online Directory and making it more user-friendly. Funds allowed MGPG to increase traffic to the online Directory via pay-per-click advertising (an approach that previously funded SCBG projects proved to be both targeted and effective); give growers more options to customize their online Directory listings by adding news, events and photos (previous SCBG projects have assisted MGPG in making the online Directory the most popular and comprehensive site for consumers to connect with specialty crop growers); create customized promotional materials (previous SCBG projects have also created new promotional items for specific specialty crops); increase specialty crop specific advertising in the printed Minnesota Grown Directory (the printed Directory and online Directory go hand-in-hand and using SCBG funds to promote specialty crops in the printed Directory helps maximize the impact of previous efforts).

PROJECT APPROACH

5. *Briefly summarize activities performed and tasks performed during the grant period. Whenever possible, describe the work accomplished in both quantitative and qualitative terms. Include the significant results, accomplishments, conclusions and recommendations. Include favorable or unusual developments.*

To accomplish the goal of increasing demand for Minnesota specialty crops by linking consumers with growers via the online Minnesota Grown Directory we undertook the following activities and tasks:

Sponsored search advertising (Pay-Per-Click) continued to be an extremely targeted, effective and measurable way to bring interested consumers to the online Directory. This SCBG grant paid for a sponsored search campaign from December 1, 2013 through January 15, 2015. Sponsored search efforts after January 15, 2015 were paid for by the FFY '14 grant. Here are the sponsored search advertising results by ad group during the timeframe covered by this grant.

Apples	36,056 clicks (27,224 Google, 8,832 Bing)
Christmas trees:	21,224 clicks (17,324 Google, 3,900 Bing)
Berry farms:	27,736 clicks (12,754 Google, 14,982 Bing)

CSA:	4,879 clicks (3,841 Google, 1,038 Bing)
Farm wineries:	20,418 clicks (15,764 Google, 4,654 Bing)
Pumpkin patches:	8,945 clicks (8,418 Google, 527 Bing)
Honey:	13,580 clicks (6,554 Google, 7,026 Bing)

Because PPC advertising is specific to a given set of keywords, we can ensure that SCBG funds are only used to promote eligible specialty crops. For example, people searching for “apples” are shown our ad promoting Minnesota Grown apples and are taken to our online Directory only if they click on the ad for apples. The MGPG uses PPC for promotion of non-specialty crops but they pay for that advertising directly with their own funds.

Likewise, it is easy to ensure that sponsored posts on Facebook only benefit specialty crop producers. The only sponsored posts paid for with SCBG funds are those posts that specifically promote eligible specialty crops.

Although Facebook advertising is a relatively small part of the cost associated with this objective, it is an effective tool that complements our sponsored search campaign. During this time period, we spent just over \$1,500 on Facebook advertising (compared to more than \$55,000 on sponsored search campaigns). These “boosted posts” on Facebook resulted in nearly 4,800 clicks to our online Directory (a cost of roughly 34 cents per click – very comparable to the cost per click of sponsored search).

To accomplish the goal of increasing members’ ability to connect with consumers through the Minnesota Grown website via integration of social media and enhancements to members’ detailed pages, news, events and photos we undertook the following activities and tasks:

We fully integrated our social media activities with the home page of the website. This includes both Facebook and Pinterest. The website automatically adds our new Facebook posts and our new Pinterest pins to a prominent location of the home page, ensuring that we are driving consumer traffic in both directions. In the past, we could bring people to the webpage from Facebook but there was no consistent way to introduce website users to our Facebook page.

We also launched a robust calendar of events on the home page. This allows us to simultaneously promote events and our members. For example, the annual Minnesota Garlic Festival is a popular annual event attended by several thousand consumers. Many Minnesota Grown members exhibit at the event to sell their locally grown garlic. Our new calendar includes information about the Garlic Festival and provides direct links to the Minnesota Grown members who sell garlic at the event. And the detailed pages of those members who are selling garlic at the event automatically have a link from their detailed page to the event page in our calendar program.

We have significantly improved the functionality and appearance of the photos and logos that members can provide on their detailed pages. The photos look much better and are shown in the form of a slide show instead of static pictures on the side of their detailed listing page.

As a reminder, our online Directory includes a small percentage (just under 20%) of non-specialty crop farmers. To account for this given USDA’s strict interpretation of the eligible activities, the MGPG pays 20% of the cost of all web improvements within this project.

To accomplish the goal of developing, printing and distributing point of sale materials to identify and promote specialty crops we undertook the following activities:

SCBG funds were used to create four distinct promotional items for specific Minnesota Grown specialty crops.

- Plant Stakes: 430 orders from farms for a total of 309,216 plant stakes
- Rubber Bands: 422 orders from farms for a total of 250,192 rubber bands
- Bunch Tags: 159 orders from farms for a total of 81,250 bunch tags
- Wine Displays: 51 orders from farm wineries for a total of 155 wine displays

Rather than print a single elastic band with attached tag for writing, we opted to create a rubber band and a separate bunch tag that can be attached to the rubber band. Both items have the

Minnesota Grown logo. This makes a much more cost-effective promotion and gives more flexibility to the farmer.

To accomplish the goal of increasing consumer awareness of local foods and the availability of specialty crops through advertisement on a special television program on Minnesota Public Television and by adding new specialty crop content to the printed Minnesota Grown Directory we undertook the following activities and tasks:

The Minnesota Public Television program has been completed and aired several times. Titled "Farm Fresh Road Trip", the program was nominated for and received an Upper Midwest Emmy® Award. The "Farm Fresh Road Trip" traveled to restaurants across the state to film chefs using farm fresh local foods in their meals as a means of informing consumers about the importance of using Minnesota produce.

Here's a link to our landing page: <http://minnesotagrown.com/farm-fresh-road-trip/> This page received more than 1,250 visits during the duration of this SCBG project.

All six segments featured multiple specialty crops. Following is a list of the segments, restaurants highlighted, and the specialty crops featured:

Segment One: Foxy Falafel, St Paul

- Cauliflower
- Cucumbers
- Parsley
- Tomatoes

Segment Two: Spanky's Stone Hearth, Frazee

- Cucumbers
- Mint
- Strawberries

Segment Three: Zellas, Hutchinson

- Basil
- Sweet Corn
- Frontenac Gris (Cold-hardy wine grape)
- Honey
- Lettuce
- Onion
- Tomatoes

Segment Four: Lake Avenue Cafe, Duluth

- Basil
- Carrots
- Celery
- Fennel
- Greens/Lettuce
- Onions
- Tomatoes

Segment Five: Strip Club Meat & Fish, St Paul

- Blueberries
- Garlic
- Honey
- Mint
- Rosemary
- Sweet Corn
- Swiss Chard
- Tomatoes

Segment Six: River Rock Cafe, St Peter

- Basil
- Blueberries

To ensure that SCBG funds allocated to the "Farm Fresh Road Trip" were used solely for the benefit of specialty crop producers, we only provided funds toward the segments that promote specialty

crops and specialty crop producers. The balance of the funding for the program comes from other advertisers. Of the 6 segments in the program, 2 segments feature only eligible specialty crops but all 6 segments include at least one specialty crop. SCBG funds provided \$10,000 of the total program cost of \$60,000 (just under 17% of the total cost and only enough to cover 1 of the 2 segments that are solely benefitting specialty crops).

The 2014 Minnesota Grown Directory was successfully printed and ready for distribution in April, 2014. As expected, we printed 170,000 copies of the popular annual Directory that featured nearly 1,000 locations where consumers can purchase specialty crops directly from the grower. The four full pages devoted to specialty crops included one page each for Christmas trees, farm wineries, CSA farms and berries. See appendix to view the Christmas tree page as printed.

6. *Present the significant contributions and role of project partners in the project.*

The MGPG includes representation from the statewide producer associations of apples, Christmas trees, grapes, honey, landscaping crops (trees, shrubs and flowers), produce growers who market via farmers markets, and produce growers who market to grocery stores, schools and restaurants. Project partners have provided key input into the design of promotional materials, especially members of the Minnesota Grape Growers Association with the new wine displays. The Minnesota Fruit and Vegetable Growers Association, Minnesota Grape Growers Association, and Minnesota Apple Growers Association all invite the Minnesota Grown Program to attend and exhibit at their annual conferences to display and promote the promotional items. The MDA provides the staff time needed to implement the project on a day to day basis. By providing this ongoing staff support, the MDA enables SCBG funds to go directly to tangible project activities instead of to pay for staff time.

GOALS AND OUTCOMES ACHIEVED

7. *Supply the activities that were completed in order to achieve the performance goals and measurable outcomes for the project.*
 - a. See question 5 above for a listing of activities for each goal.
8. *If outcome measures were long term, summarize the progress that has been made towards achievement.*
 - a. Technology is ever-changing and changes in technology require ongoing investments in programming. With the assistance of USDA's Specialty Crop Block Grant program, we made several improvements to our website that will pay long-term dividends. Previous SCBG funded decisions such as moving to a responsive design to better serve mobile phone and table users proved to be the right move. During this project, the decision to increase the connections between our website and our social media platforms also appears to be spot-on, given the increasing use of social media throughout all demographic spectrums.
9. *Provide a comparison of actual accomplishments with the goals established for the reporting period.*

Measurable Outcome #1

- **GOAL:** To increase the number of consumers who purchase Minnesota Grown specialty crops as a result of their visit to the Minnesota Grown Directory.
- **PERFORMANCE MEASURE:** Using Google Analytics, we measured the number of unique visitors to www.minnesotagrown.com.
- **BENCHMARK:** In calendar year 2012, we received 222,000 unique visitors.
- **TARGET:** Our goal was to have a 10% increase in the number of unique visitors.
- **Actual:** In calendar year 2013, we received 266,000 unique visitors – an increase of 20%.

Measurable Outcome #2

- **GOAL:** To increase sales of Minnesota specialty crops, and increase access to distribution systems and new markets for specialty crops by increasing awareness of the connections between chefs and specialty crop farmers and by driving viewers of a public television program to custom web landing pages promoting specialty crops.
- **PERFORMANCE MEASURE:** Using Google Analytics, we tracked the number of unique visitors to a landing page on the Minnesota Grown website.
- **BENCHMARK:** The benchmark is -0-.
- **TARGET:** We expect to receive 5,000 unique visitors to the landing page during this project.

- **Actual:** We used Google Analytics to capture traffic to the landing page: <http://minnesotagrown.com/farm-fresh-road-trip/>
More than 1,250 visitors came to this landing page during the period funded by this grant, less than the target.

Measurable Outcome #3

- **GOAL:** To increase the competitiveness of Minnesota specialty crop producers by providing them with effective promotional materials to increase their sales and visibility.
- **PERFORMANCE MEASURE:** We tracked producer orders for elastic bands, plant stakes, and wine displays. We will survey producers who order the items, asking questions related to the effectiveness and impact on sales.
- **BENCHMARK:** -0-
- **TARGET:** To have at least 75% of producers who use the new items report that sales increased because of the promotional material.
- **Actual:** We surveyed producers who ordered the items and 95% of those who responded said that they believe sales increased because of the promotional material. We also gave respondents a chance to provide comments. Here are a few samples:
 - "Yes, we believe that packaging our products neatly does help to sell items!"
 - "The promotional items make us (farmers) look good, more professional and we believe that customers have a better feeling about the food they are buying knowing it was grown locally and that we are proud members of MN Grown. The grocery stores that we sell to also love it. They have used the signage, rubber bands and the bunch tags proudly. It shows that they the grocery store is supportive of us local farmers and we think they think it makes them look good to the community...which it does!!!! :)"
 - "Customers DEFINITELY know the MN Grown brand and notice the labels we put on our products. It leads to them asking questions about us, what we grown and and that discussion leads to great enthusiasm for our products. Without MN Grown we would have a much more difficult time differentiating ourselves from the innumerable "look like local" items we compete with."
 - "yes-several farmers market customers gave positive feedback"

10. *Clearly convey completion of achieving outcomes by illustrating baseline data that has been gathered to date and showing the progress toward achieving set targets.*

See question 9 above for benchmarks, targets and actual outcomes.

BENEFICIARIES

11. *Provide a description of the groups and other operations that benefited from the completion of this project's accomplishments.*

- Approximately 1,200 specialty crop growers were members of the Minnesota Grown Program during the course of this project. This includes Christmas tree growers, nurseries, garden centers, apple growers, berry growers, farmers market vendors, and grape growers.
- New farmers are an important segment of our members. The Minnesota Grown Program adds an average of 80 new members each year. Many are beginning farmers eager to capitalize on the existence of a comprehensive, affordable, effective statewide marketing program such as Minnesota Grown. The Specialty Crop Block Grant Program is a tremendous benefit to the statewide efforts of this program, providing funds to implement activities that the MDA's program budget is unable to afford.

12. *Clearly state the quantitative data that concerns the beneficiaries affected by the project's accomplishments and/or the potential economic impact of the project.*

- a. The MDA has surveyed of Minnesota specialty crop growers who are listed in the Minnesota Grown Directory. The results provide clear evidence of the fact that consumers who use the Directory to facilitate their purchases of specialty crops. Over 95% of specialty crop growers who responded to the survey report that the Minnesota Grown Directory has influenced at least a percentage of their sales. In fact, 12% of participating specialty crop growers reported that the Directory is responsible at least 25% of their direct to consumer sales.

- b. Further evidence of how this Directory increases the competitiveness of specialty crops by generating actual sales of specialty crops can be found in results of the MDA's surveys of customers of berry farms, apple orchards and Christmas tree farms. This in-depth consumer research was funded in part by USDA's Federal-State Marketing Improvement Program (FSMIP). Of the nearly 500 apple orchard customers who participated in the survey, 6% reported using the online Minnesota Grown Directory to find and gather information about the orchard. These customers report an average purchase of \$38.75 per visit to the orchard. For the more than 700 participating customers at pick-your-own berry farms, 20% used the Directory (on-line or print) to gather information about the farm they chose. Their average purchase price was \$31.68 per visit. For choose and cut Christmas tree farms, 10% of their customers reported that the Minnesota Grown Directory provided them with information about the farm. The average purchase price for these customers was \$73 per visit.
- c. Here are the number of growers and the number of clicks for each of our major campaigns that were paid for by this project:

Apples	36,056 clicks (27,224 Google, 8,832 Bing)
Christmas trees:	21,224 clicks (17,324 Google, 3,900 Bing)
Berry farms:	27,736 clicks (12,754 Google, 14,982 Bing)
CSA:	4,879 clicks (3,841 Google, 1,038 Bing)
Farm wineries:	20,418 clicks (15,764 Google, 4,654 Bing)
Pumpkin patches:	8,945 clicks (8,418 Google, 527 Bing)
Honey:	13,580 clicks (6,554 Google, 7,026 Bing)

LESSONS LEARNED

1. *Offer insights into the lessons learned by the project staff as a result of completing this project. This section is meant to illustrate the positive and negative results and conclusions for the project.*
 - a. Social media platforms are a legitimate marketing tool that continue to show promise for the marketing of specialty crops. The number of visitors who came to www.minnesotagrown.com directly from a Facebook page increased by more than 45%, from 10,591 in 2014 to nearly 15,428 in 2015. Facebook advertising (promoted posts and Facebook ads) are a cost-effective tool that growers should consider utilizing. We have found the cost per clickthrough using Facebook ads to be very similar to the cost per click of sponsored search advertising. Through this project, our promoted posts and ads related to specialty crops were seen by just over 414,000 people at a cost of just under \$4 for every 1,000 people that sees the ad.
 - b. As expected, the way consumers access information online has changed dramatically. This impacts all businesses that serve the public, including specialty crop farmers as well as service providers like Minnesota Grown. It affects the design and content of web pages, electronic newsletters, and any other electronic communication. During the two full calendar years covered by this project, Google Analytics for www.minnesotagrown.com provides clear evidence of the continuing shift to smart phones and tablets. In calendar year 2014, desktops accounted for 50% of our web traffic. In just one year, this dropped by 5% to just under 45% of all traffic. Smart phone users accounted for the vast majority of the shift, increasing from 36% of traffic in 2014 to 41% in 2015. Tablet accounted for the balance of traffic, increasing slightly from 13.7% of traffic in 2014 to 14.5% in 2015.
2. *Provide unexpected outcomes or results that were an effect of implementing this project.*

N/A
3. *If goals or outcome measures were not achieved, identify and share the lessons learned to help others expedite problem-solving.*

We created a new landing page and set a target of 5,000 visitors. We fell short of this goal with just under 1,300 visitors. The lesson is that it is very difficult to predict consumer traffic to new web content. For future activities we would create highly visible links and on-site ads promoting a new page to increase traffic. We would also consider using pay-per-click advertising and promoted Facebook posts to drive traffic to a new page.

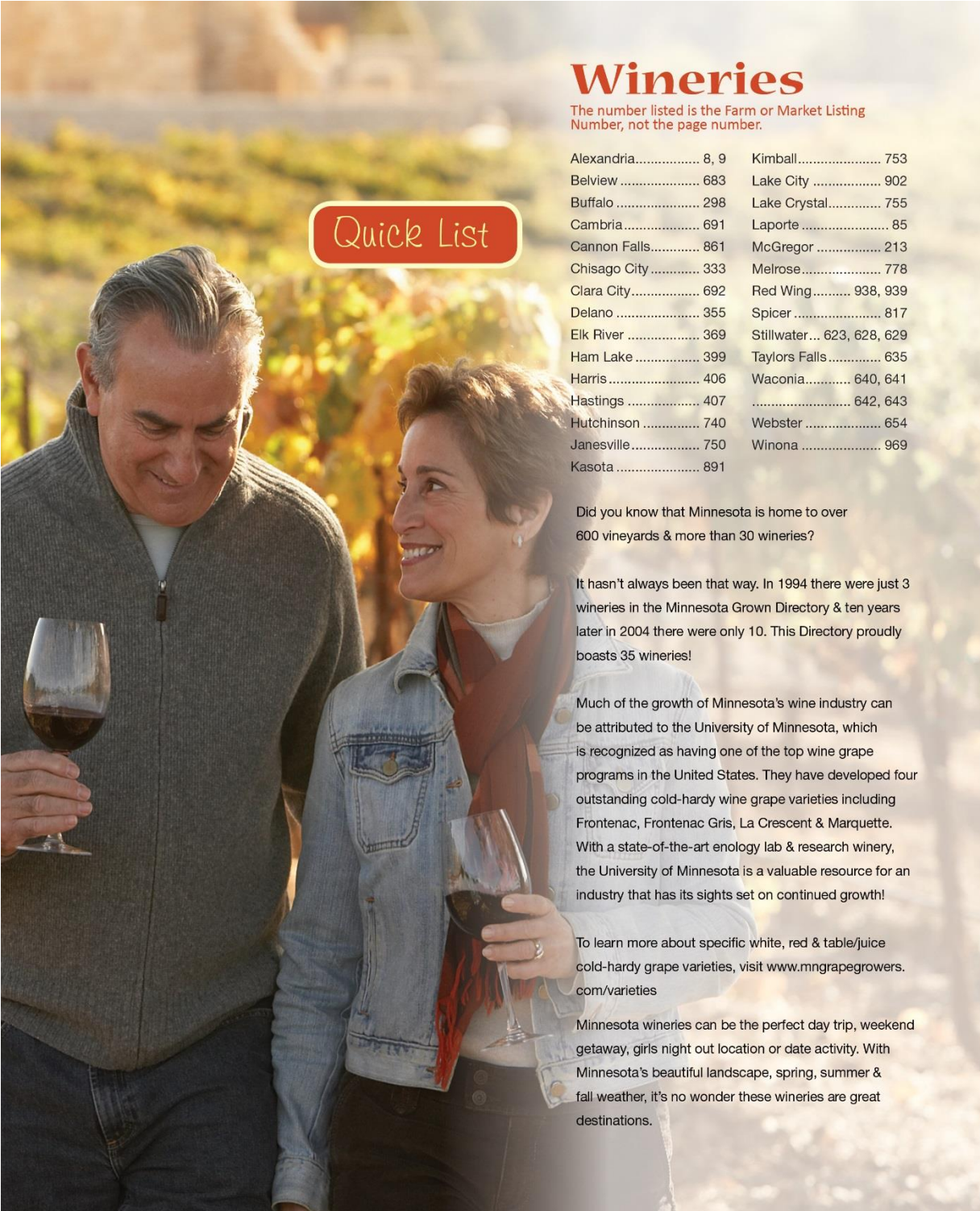
ADDITIONAL INFORMATION

4. Provide additional information available (i.e. publications, websites, photographs) that is not applicable to any of the prior sections.

The Minnesota Grown website is viewable at www.minnesotagrown.com

APPENDIX

2014 DIRECTORY ADS



Wineries

The number listed is the Farm or Market Listing Number, not the page number.

Quick List

Alexandria.....	8, 9	Kimball.....	753
Belview	683	Lake City	902
Buffalo	298	Lake Crystal.....	755
Cambria.....	691	Laporte	85
Cannon Falls.....	861	McGregor	213
Chisago City.....	333	Melrose.....	778
Clara City.....	692	Red Wing.....	938, 939
Delano	355	Spicer	817
Elk River	369	Stillwater... 623, 628, 629	
Ham Lake	399	Taylor's Falls.....	635
Harris	406	Waconia.....	640, 641
Hastings	407	642, 643
Hutchinson	740	Webster	654
Janesville.....	750	Winona	969
Kasota	891		

Did you know that Minnesota is home to over 600 vineyards & more than 30 wineries?

It hasn't always been that way. In 1994 there were just 3 wineries in the Minnesota Grown Directory & ten years later in 2004 there were only 10. This Directory proudly boasts 35 wineries!

Much of the growth of Minnesota's wine industry can be attributed to the University of Minnesota, which is recognized as having one of the top wine grape programs in the United States. They have developed four outstanding cold-hardy wine grape varieties including Frontenac, Frontenac Gris, La Crescent & Marquette. With a state-of-the-art enology lab & research winery, the University of Minnesota is a valuable resource for an industry that has its sights set on continued growth!

To learn more about specific white, red & table/juice cold-hardy grape varieties, visit www.mnrapegrowers.com/varieties

Minnesota wineries can be the perfect day trip, weekend getaway, girls night out location or date activity. With Minnesota's beautiful landscape, spring, summer & fall weather, it's no wonder these wineries are great destinations.



Quick List

CSA Community Supported Ag Farm

The number listed is the Farm or Market Listing Number, not the page number.

Afton.....	251, 253	Maplewood.....	484
Albert Lea.....	843	Marine On St. Croix.....	486, 487
Alexandria.....	10	Metro.....	214
Altura.....	847	Milaca.....	217
Apple Valley.....	272	Minneapolis.....	505, 506
Avon.....	676	Minnetrista.....	513
Babbitt.....	162	Montevideo.....	782
Barrett.....	19	Montgomery.....	915, 917
Big Lake.....	282, 283	Monticello.....	516
Brainerd.....	37, 40, 41	Montrose.....	522
Brooten.....	686	Mora.....	223
Buffalo.....	299, 306	Mountain Lake.....	788
Cambridge.....	313	Nerstrand.....	919
Clearwater.....	340	New London.....	789
Clements.....	694	New Ulm.....	794, 796
Cold Spring.....	697	North Branch.....	533, 535
Delano.....	354	Northfield.....	928, 930
Dundas.....	865	Norwood.....	545
Elgin.....	868	Ogema.....	107
Embarrass.....	180	Park Rapids.....	111
Felton.....	60	Pelican Rapids.....	116
Fergus Falls.....	61	Princeton.....	565
Finlayson.....	183	Prior Lake.....	568, 572
Frazee.....	70	Ramey.....	130
Glencoe.....	718	Rush City.....	583
Glenwood.....	728	Rushford Village.....	951
Harris.....	403	Sebek.....	140
Hector.....	736	Shakopee.....	595
Henderson.....	886	Shevlin.....	141
Henning.....	78	Spring Valley.....	952
Hollandale.....	887	Staples.....	144
Hugo.....	429	Starbuck.....	828
Hutchinson.....	742, 745	Stewart.....	830
Iron.....	203	Stillwater.....	624
Isanti.....	439	Ulen.....	149
Jackson.....	748	Waseca.....	958
Jordan.....	442	Watertown.....	648, 649, 650
Lindstrom.....	460	Waverly.....	651
Litchfield.....	765	Welch.....	963
Longville.....	91	Zimmerman.....	671

CSA farms are a fast-growing direct-farm marketing & production model. Consumers get fresh, healthy & local food directly from the farm. A CSA farm sells subscriptions (or memberships) to their farm generally in late winter or early spring. Members pay up front & then receive a share of produce, generally once a week for 14-20+ weeks. Some meat/poultry & flower farms have adopted this CSA marketing model as well. Shares are either picked up on the farm or delivered to a designated drop site. Often, CSA farms offer on-farm activities, weekly newsletters & other membership benefits. Each farm varies in what it offers, how much it costs, the delivery/pick-up locations & the length of its season. It's important to understand that CSA memberships involve a shared risk & reward – you share in the bounty of the crops that do well & the risk of crop failure. Many CSA farms have drop sites outside the city they are located in.

Joining one of the 95 CSA farms in the Minnesota Grown Directory is a great way to connect with the local community & your local farmer!

85 Strawberry Farms

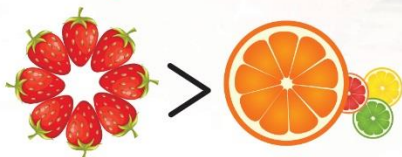
The number listed is the Farm or Market Listing Number, not the page number.

Quick List

Aitkin.....	4, 158	Mabel.....	912
Alexandria.....	7	Mahtomedi	471
Annandale	264	Marine On St. Croix.....	488, 489
Anoka	266	Markville	210
Arlington	675	Middle River	94
Bagley.....	16	Milaca.....	217
Battle Lake	22	Monticello	520
Beaver Creek.....	681	Montrose	523
Brainerd.....	33, 36, 39	Moorhead.....	98
Buffalo	307	Mound	525
Cambridge.....	314	New Munich	791
Carlton.....	165	Nisswa.....	105
Champlin	320	North Branch	537
Chaska	326	Northfield.....	543, 544
Clear Lake	336	Norwood.....	545
Cold Spring	701	Ottertail.....	109
Dassel.....	705	Park Rapids.....	112
Denmark Township.....	356	Paynesville.....	802
Edina	366	Plymouth	557
Eveleth.....	181	Preston	936
Eyota	875	Raymond	806
Faribault.....	877	Redwood Falls.....	807
Fertile.....	63, 64	Rochester	941
Foley.....	66, 68	Rush City.....	582
Forest Lake.....	393	Sauk Centre.....	813
Glenwood	727	Shafer	591
Good Thunder	731	Shakopee	596
Grand Rapids	190	South Haven.....	600
Hastings	414, 415	St. Louis Park	606
Henning	78	St. Michael.....	609
Heron Lake.....	738	Taylors Falls.....	633
Hinckley.....	196, 199	Twin Lakes.....	955
Howard Lake	422	Verndale.....	151
Hutchinson	745	Villard.....	832
Isanti.....	433	Virginia.....	249
Jordan	443	Watkins.....	833
Le Sueur	760	Wayzata	652
Long Lake.....	469	White Bear Lake.....	661

Minnesota's strawberry season begins in southern Minnesota and gradually moves north. Northern Minnesota growers typically begin their season two weeks after their metro area counterparts. The length of the season usually depends on the weather. Mild temperatures in the 70's and low 80's extend the season by letting the berries ripen at a steady pace while excessive heat can shorten the season and cause berries to ripen more quickly. Conditions vary from farm to farm and can fluctuate from day to day depending on the weather. Always call ahead or check the website before you visit. Minnesota strawberry season only comes once each year and we don't want anyone to miss out on the wonderful flavor of fresh picked berries!

Berry Nutritious



8 medium-sized strawberries contain more vitamin C than citrus fruit (like an orange)

Vitamin C boosts your immune system to keep you feeling good. The high amount found in strawberries has been linked to reduced risk of cancer, suppressing the progression of tumors and maintaining healthy weight



12 or more strawberries each day helps keep your vision clear



Potassium makes strawberries good at regulating blood pressure and keeping your heart healthy



Strawberries can also slow the effects of aging and keep your skin wrinkle-free

Fun Facts



A strawberry's sweetness comes from the sun, while moisture affects the size ...
More moisture = bigger strawberries!

Strawberries are the first fruit to ripen in the spring. Blueberries and raspberries typically ripen just as strawberry season wraps up
keep your eye out!



The average Minnesotan eats about 5 lbs. of strawberries per year!



Picking Tips



Call your grower ahead of time to make sure the berries haven't been picked out!

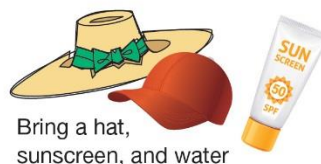


Wear comfortable shoes



Pick with the stem and cap intact to keep berries fresh

Check if your grower provides containers or plan to bring your own



Bring a hat, sunscreen, and water

All information was compiled from Minnesota Grown members, the University of Minnesota Extension, and the USDA

59 Christmas tree farms & grower-owned retail lots

The number listed is the Farm or Market Listing Number, not the page number.

Quick List

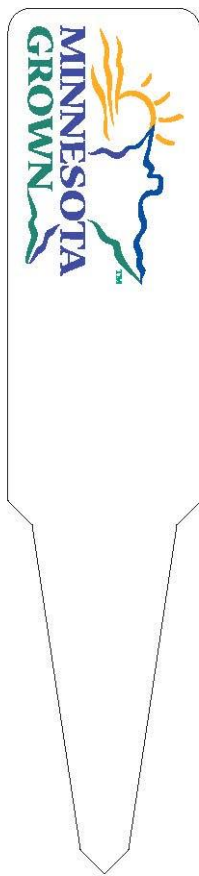
Andover	260	Lakeville	449, 452
Anoka	267	Litchfield	767
Apple Valley	271, 273	Maple Grove	474
Belview	684	Morris	786
Big Lake	285	New Market	527
Blaine	290	New Ulm	793
Cambridge	316	Oak Grove	550
Champlin	322	Parkers Prairie	114
Chaska	329	Perham	122
Clear Lake 335, 337, 339		Prior Lake	571
Dilworth	54	Rice	133
Duluth	168	Rock Creek	239
Dundas	865	Rosemount	579
Eden Prairie	360	Royalton	135
Elk River	372	Sandstone	241
Farmington	385	Scandia	587
Forest Lake	388, 390	Sleepy Eye	816
Grand Rapids	193	St. Croix Falls	603
Grey Eagle	74	St. Francis	605
Hampton	401	St. Paul	611, 617
Howard Lake	418	Stacy	620
Isanti	434, 440	Stillwater	624, 630
Kellogg	893	Waconia	644
Kettle River	208	West St. Paul	656
Lake City	905	Zimmerman	669
Lake Elmo	446		

Purchasing a real, locally grown Christmas tree is about more than just the tree; it's about the experience your family will have. Many Christmas tree farms provide a wonderful family-friendly bonding time that everyone will remember for years to come. The rows of trees provide a beautiful natural backdrop for those candid pictures or for your annual Christmas card photo. Many farms offer additional activities like wagon/sleigh rides, custom wreath making and some are even visited by Santa! Some farms let you warm up in the shop with cider and cookies while you browse the selection of gifts, decorations and wreaths.

PROMO ITEMS



WINE DISPLAY



PLANT STAKE



BUNCH TAG



RUBBER BAND



Rubber Band with Bunch Tag

Project 3

MN Specialty Crop Block Grant FINAL PERFORMANCE REPORT

Submitted by: Meg Moynihan

e-mail & phone number: meg.moynihan@state.mn.us, 651-201-6616

Date: December 9, 2015

PROJECT TITLE

1. Spotlight on Specialty Crops

PROJECT SUMMARY

2. Background: We used a 29-station commercial agricultural radio network to tell the stories of 12 Minnesota farmers who successfully grow and market a variety of specialty crops. The growers told their own stories and reached more at least 257,500 farm and rural listeners. Those who were interested in a particular specialty crop option found more information through links to specially designed web pages for each topic.
3. Motivation: The diversification that specialty crops provide can serve as important strategy for farmers looking to enhance production, profitability, and personal satisfaction on their farms. Our advisory team posited that while farmers are looking for new ways of generating income, some of the reports about the profitability of specialty crop enterprises are specious and inflated. The team exercised care during the recommendation process not to include enterprises with a low likelihood of success.
4. Previous work: This project did build on previous work: 1) On a sustainability-oriented radio series funded by the Sustainable Research and Education Program, with which we had success; and 2) On a SCBG-funded programs that generated production and profitability data from a set of Minnesota specialty crop growers -- data that documented that specialty crops can be unprofitable as well as profitable.

PROJECT APPROACH

5. Activities and tasks:
 - The project leader identified, recruited, and contracted with a team of five advisors for the project. They were:
Christmas tree grower Doug Hoffbauer (North East MN)
Organic CSA vegetable farmer Mark Boen, (West Central MN)
Fresh market vegetable farmer Lonny Dietz, (Southeast MN)
Diversified grower and MN Farmers Market Executive Director Kathy Zeman, (Southeast MN)
Minnesota Fruit & Vegetable Growers Assn. Executive Director Marilyn Johnson
 - The MDA contracted with production and broadcast partner Minnesota Farm Network to produce and air 12 60-second profiles of specialty crop enterprises in Minnesota.
 - The team of advisors met via conference calls and e-mail to identify topics and growers for the radio profiles and helped develop a standard story format.
 - MDA hired part time student worker to assist with topic research. The project leader and student worker worked with Department of Agriculture web team to enhance topic pages that did not already exist and to create new ones that didn't. The MDA created a landing page (www.mda.state.mn.us/spotlight) where visitors could (and can still) listen to the 60 second stories and find links to web-based information about growing and marketing each specialty crop.
 - The project leader worked with MDA communications staff to ensure that each program was promoted via social media and the overall project was promoted via traditional media as well. We promoted each program on

sustainable agriculture listservs and to an email group of regional sustainable and organic organizations. Advisory team members shared project and program information with their own networks.

6. Partner roles and contributions. The advisory team took an active role, providing valuable input into shaping the format of the show as well as helping determine which specialty crop topics are most timely and would be of most interest to farmer listeners. They also helped identify profile-worthy farmers – that is, experienced individuals who would be easy to listen to in a radio interview. Minnesota Farm Network undertook all responsibility for production and broadcast of the stories. They also posted the *Spotlight* series on the their main web page, and provided longer form interview recordings that they used on another weekly broadcast, *Midwest Ag Journal*, as well linking to the MDA Spotlight page (where the 60 second versions and topical information links were and still are housed).

GOALS AND OUTCOMES ACHIEVED

7. Activities completed by project leader and partners:
 - Created five member advisory team
 - Identified 12 appropriate topics
 - Created and aired 12 :60 radio stories
 - Created and aired 12 long form interviews that aired on another weekly radio program (unanticipated)
 - Using the same Nielson TAPSCAN National Regional Database information referred to elsewhere in the report, beneficiaries of the unanticipated outcome (12 long form interviews aired over 12 weeks on another weekly radio program, *Midwest Ag Journal*) included 257,250 people. We have no way to know how many of these listeners were current or potential specialty crop producers.
 - Researched web-based resources about all 12 topics and created web pages for them
 - Promoted the series widely
 - Monitored and reported project progress
8. Outcome measures: The project's desired outcome was broader producer awareness of successful specialty crop enterprises and specialty crop options in Minnesota. We divided this into two goals, each with its own targets.

Goal 1: One feature story reaches 220,000 radio listeners per month for 12 months. We tightened up our production and broadcast schedule to two shows per month for six months with broadcasts starting in July 2014. We produced and aired 12 Spotlight segments between July 14 and December 19, 2014. Executives at MFN report that, according to Nielson TAPSCAN National Regional Database, the program reached 257,250 people, who heard an average of 6.2 shows, for 1,587,000 "total impressions.

Goal 2: 100 individuals (equivalent to 20% of the existing 421 specialty crop operations in Minnesota) would visit the MDA web site to listen to broadcasts a la carte or to seek information about the crops profiled. We subsequently amended this goal to reach 1,000 unique page view by the end of the project period.) According to Nettracker, 454 unique visitors listened to the online Spotlight shows a total of 498 times. According to Google Analytics, 1,074 people visited topic or transcript pages 1,524 times.

9. Comparison goal: actual

Goal: one feature story reaches 220,000 per month for 12 months Actual:

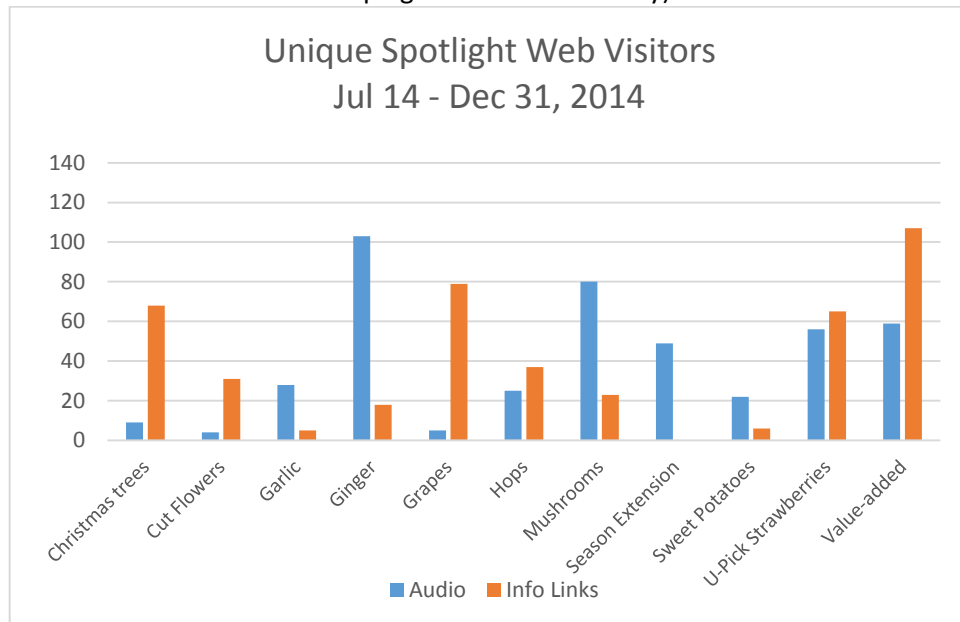
Actual: 257,500 listeners each heard an average of 6.2 Spotlight shows, times each, for a total of 1,587,000 total impressions during the project period. The original goal was based on Arbitron data provided by our MFN project partner and predicated on a 12 month period. For this final report, the new station staff provided Nielsen data for the actual 6 month broadcast period. More listeners (257,250) heard at least one Spotlight segment than we projected (220,000), but the total impressions (1.59M) was less than projected (2.6M).

Original Goal: 100 individuals visit MDA web site to listen to broadcasts online or seek information.

Amended goal: 1,000 unique page views

Actual: Exceeded original and amended goals: 454 unique visitors listened to Spotlight shows online and 1,074 unique visitors sought topic information online.

10. Convey completion by illustrating data: The following chart illustrates the number of unique audio file listeners and topic page visitors, with the exception of Honey, whose numbers were 14 and 631, respectively. This anomaly (where information page traffic greatly exceeds visits to the .mp3 audio files) suggest that in some cases, a large number of visitors likely happened upon some of the info/resources page via other routes (E.g., google search for Minnesota beeping or Minnesota honey).



BENEFICIARIES

11. Groups that benefitted:

- Minnesota Department of Agriculture, which enhanced its information offerings and advanced its statutory obligation to help producers diversify farming operations. (M.S. §17.03 Subd. d)
- Minnesota Farm Network, which generated broadcasting revenue and broadcast materials for two series (60 second spotlight and longer pieces used on a weekend features show)
- Minnesota Fruit and Vegetable Growers Assn., which shared the resource with members for their benefit and advertised MFVGA's own role in producing it.
- Farmer advisors, who had an opportunity to share their opinions on areas of interest and need with State officials and to develop a new network by collaborating w/ others on the team, many they'd never met before.

12. Quantitative beneficiary data:

- MDA – 12 audio files, 12 transcripts, 12 new or enhanced specialty crop information page offerings, public visibility through promotion of this resource (both traditional and social media.)
- MFN – \$18,000 revenue (contract for production and airtime), and personal communication with farm broadcaster Emery Klevin, who asked for permission to use his interview tape in longer broadcasts and indicated that participating had affected him in ways he did not expect:
 - *"The shows have been excellent. I know I've learned a lot about specialty crops. And sharing with our audience, I'm sure it perked the interest of some. The partnership and the credibility that the MN Department of Agriculture brings, means a lot to the audience and to our network. I'm sure these interviews and shows will be used as a reference for quite a while. Your website and the links add a lot to the programming. I am planning follow-ups next year as I try to visit in person as many of the specialty farms I interviewed as possible."* – Emery Klevin
- MFVGA – informed members about the project several times in the association's newsletter.
- Farmer advisors – were each remunerated with a stipend for their participation expertise. Several expressed via personal communication that they enjoyed the experience and meeting new people.

- We produced and aired 12 Spotlight segments between July 14 and December 19, 2014. Executives at MFN report that, according to Nielson TAPSCAN National Regional Database, the program reached 257,250 people, who heard an average of 6.2 shows, for 1,587,000 “total impressions”.
 - According to Nettracker, 454 unique visitors listened to the online Spotlight shows a total of 498 times. According to Google Analytics, 1,074 people visited topic or transcript pages 1,524 times
 - Using the same Nielson TAPSCAN National Regional Database information referred to elsewhere in the report, beneficiaries of the unanticipated outcome (12 long form interviews aired over 12 weeks on another weekly radio program, Midwest Ag Journal) included 257,250 people. We have no way to know how many of these listeners were current or potential specialty crop producers.
 - Farmers and other members of the public who used the information, as measured by the 454 people that were tracked as listening to the Spotlight shows online and the 1,074 who sought additional information at topic information landing pages. For example, one Nebraska farmer, who found and listened to the story online, wrote: “My initial plan was to build an underground greenhouse... growing crops over the winter and being able to market them in the off season for more profit...After listening to some of the interviews, it seems there is a better alternative, which is growing in the regular season and selling specialty crops at more traditional places like the farmers market.”
 - Total Project Beneficiaries: 258,778 people/visitors (454 for the Online Spotlight Shows + 1,074 visitors to the topic or transcript pages + Spotlight Segment Viewers).
13. Lessons Learned: This project experience underscored the importance of building flexibility into the structure of a project. For example, once the Spotlight advisory team convened, we mutually decided—for logistical and listener impact-reasons—to run two shows per month for six months rather than one show per month for 12 months. We also realized that in order to comply with accessibility requirements, we would have to provide a transcript of each Spotlight show on the web site, along with the .mp3 recording. MFN agreed to provide, and MDA posted a written transcript of each 60 second Spotlight show. The extra work was shared by both of the major project partners. We learned that tracking interest and/or participating using web user traffic is complicated and conflated by the fact that individuals may take a multitude of routes to land on any given page. It became clear that different tracking software has different capabilities and can produce different results.
14. Unexpected outcomes or results: After starting production, farm broadcaster Emery Kleven found the topics and interviews so interesting that he asked permission to use them in other MFN network programming, and granted MDA permission to link web visitors to the long form interviews, thus extending the reach and impact beyond what the project envisioned. He also planned a specialty crop tour to visit many of the operation in the summer of 2015. Klevin left his position when the network was abruptly sold and staffing changed, so the tour plan did not reach fruition. New station staff have approached the MDA about doing similar sponsored topical broadcasts, however. We were disappointed to learn that the “bonus” long-form stories have disappeared from the MFN page (new station administration doesn’t know where they went or why), so we have had to remove those links from our own page, leaving only the: 60 stories, transcripts, and resource links.
15. If goals or outcome measures were not achieved, why? Project goals and outcome measures were achieved.

ADDITIONAL INFORMATION

This is the Spotlight landing page. It and all links it contains are still active at www.mda.state.mn.us/spotlight



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Spotlight on Specialty Crops



Welcome to Spotlight on Specialty Crops! This informative series features one-minute stories about Minnesota farmers who are growing specialty crops to enhance production, profitability, and personal satisfaction on their farms. The shows are broadcast on Minnesota Farm Network radio stations, or you can listen right here at this web site. We also provide links to help you learn more about any of the topics featured on the Spotlight program. This page will change as we add more shows, so check back often.

Spotlight Programs

- [Growing Christmas Trees \(Audio: MP3\) | \(Tree Transcript\)](#)
- [Flower Farming \(Audio: MP3\) | \(Flowers Transcript\)](#)
- [The Risks and Rewards of Growing Grapes \(Audio: MP3\) | \(Grapes Transcript\)](#)
- [Gertie: There's More Demand Than Supply \(Audio: MP3\) | \(Gertie Transcript\)](#)
- [Craft Brewers Create Demand for Locally Grown Hops \(Audio: MP3\) | \(Hops Transcript\)](#)
- [You CAN Grow Sweet Potatoes in Minnesota \(Audio: MP3\) | \(Sweet Potatoes Transcript\)](#)
- [Growing Baby Ginger in Minnesota \(Audio: MP3\) | \(Ginger Transcript\)](#)
- [Extending the Growing Season \(Audio: MP3\) | \(Growing Season Transcript\)](#)
- [The Buzz on Honey \(Audio: MP3\) | \(Honey Transcript\)](#)
- [Preserving and Pickling Adds Value to Summer Produce \(Audio: MP3\) | \(Pickling Transcript\)](#)
- [Elinor's U-Pick Strawberries \(Audio: MP3\) | \(U-Pick Transcript\)](#)
- [Starting a Mushroom Business \(Audio: MP3\) | \(Mushroom Transcript\)](#)

Other Resources

- [Writing a Business Plan](#) [PDF](#)
- [Minnesota Fruit & Vegetable Growers Association](#) [PDF](#)
- [Minnesota Grown Program](#) [PDF](#)
- [Specialty Crops Management Education](#) [PDF](#)

Learn More about Growing and Marketing Specialty Crops

- [Berry Growing](#)
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- [Gertie](#)
- [Ginger](#)
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Funds for this project are provided by the USDA Specialty Crop Block Grant Program.

Project 4

MN Specialty Crop Block Grant – Federal Fiscal Year 13 FINAL PERFORMANCE REPORT

Submitted by: Cindy Tong

E-mail: c-tong@umn.edu

Date: February 4, 2016

PROJECT TITLE

1. Field-based microbial assessment of leafy greens processed by direct market farms

PROJECT SUMMARY

2. *Provide a background for the initial purpose of the project, which includes the specific issue, problem, or need that was addressed by this project.*

According to the Centers for Disease Control and Prevention (CDC), about 48 million American get sick each year due to foodborne illnesses. Outbreaks of foodborne diseases associated with raw lettuce or salads contaminated with various human pathogens have been reported since 1984. Between 1990 and 2005, there were 29 *Escherichia coli* and 20 *Salmonella* outbreaks associated with "greens salads". As a consequence of outbreaks due to fresh produce, the Food Safety Modernization Act (FSMA) was proposed, establishing "standards for the safe growing, harvesting, packing, and holding of fruits and vegetables grown for human consumption". FSMA exempts farms that "have an average annual value of produce sold during the previous three-year period of \$25,000 or less". Qualified exemptions are given to farms selling the majority of their product directly to consumers or food establishments located within the same state or within a 275-mile radius of where it was produced, and have "food sales averaging less than \$500,000 per year during the previous three years". These exemptions would probably apply to a majority of Minnesota farms selling produce, as more than 90% of them farm 30 acres or fewer, on which it would be difficult to have average annual sales of \$500,000. FSMA also established regional centers to train produce farmers on food safety and Good Agricultural Practices (GAPs).

3. *Establish the original motivation for this project by presenting the importance and timeliness of the project.*

The University of Minnesota has provided education and assistance to produce farmers on food safety risks and GAPs for over 20 years. In order to determine the level of food safety risk from locally-grown leafy greens, and learn what we should emphasize in future food safety educational events, we surveyed lettuce growers on their current farm practices and measured microbial contamination on leafy greens from farms and farmers' markets.

4. *If the project built on a previously funded project with the SCBGP or SCBGP-FB describe how this project complimented and enhanced previously completed work.*

This project compliments SCBGPs awarded to Schermann et al. to perform GAPs training to Minnesota farmers, by determining areas of special emphasis and providing examples of current farming practices to enhance future trainings. This project also provided baseline data to support need for further trainings.

PROJECT APPROACH

5. *Briefly summarize activities performed and tasks performed during the grant period. Whenever possible, describe the work accomplished in both quantitative and qualitative terms. Include the significant results, accomplishments, conclusions and recommendations. Include favorable or unusual developments.*

Activities performed and Accomplishments:

- I.
 - a. In January 2014, the project principal investigators, Francisco Diez-Gonzalez, Michele Schermann, and Cindy Tong, met to plan the project experimental design and discuss farmers to contact as possible collaborators. We decided to collect two varieties of lettuce (smooth and rough) or lettuce and spinach, from the field, wash containers, storage (if applicable), and at market (if possible).
 - b. Farmers attending Good Agricultural Practices (GAPs) workshops were surveyed about their GAPs use in growing and processing leafy greens. Survey responses on GAPs usage were collected from 11 farmers.
 - c. Instead of asking farmers to attend a meeting, individual farmers were contacted about collaborating on this project, and met separately with project co-PIs. Eight (**Target: 6 farms**) farms agreed to collaborate on this project and were supplied with spinach and lettuce seeds. Samples (more than 200) for microbiological testing were collected and analyzed.
- II.
 - a. In 2015, first year study results were presented at the 2015 Upper Midwest Fruit and Vegetable Growers Conference in Saint Cloud, MN, and uploaded to a website (<http://safety.cfans.umn.edu/other-projects/leafy-greens-research/>). Field days were held at three collaborating farms on recommended food safety practices (**Target: 2 field days**).
 - b. Information gleaned from visits to collaborating farms was incorporated into two Train-the-Trainer and three Good Agricultural Practices workshops.
 - c. Twenty-eight more farmers responded to the survey of GAPs used in producing leafy greens for sale to the public.
 - d. Six new farms (**Target: 5-10 farms**) using conventional farming methods or animal manure for soil amendments were recruited to collaborate in the second year of the study. Leafy greens samples were also obtained from eight farmers' market vendors, who were interviewed on their postharvest practices for handling leafy greens.

Significant results:

- a. Fifty-six percent of survey respondents were immigrant or minority farmers.
 - b. An equal number (12, 31%) of farmers did not fertilize leafy greens as used composted manure or vegetable matter as a soil amendment (Figure 2). Other farmers used conventional fertilizers (13%) or raw manure (13%). These data suggest to us that soil amendments are an unlikely source of risk for food outbreaks from local farms.
 - c. The majority (98%) of respondents washed leafy greens, but 74% did not add sanitizer to wash water, while 21% did (5% did not respond to this question). Only one of seven respondents who added sanitizer used test strips to determine if they were using the correct amount of sanitizer. The other sanitizer users did not use any method. The numbers of respondents using well, municipal, or rain water for washing was 17 (44%), 10 (27%), and 1 (10 people did not answer this question). Dunking was the most usual method for washing (78%), with spraying as the alternative. Wash water was most often changed "when dirty" (59%), otherwise once or twice a day (13%), or after every batch of greens (10%); 18% (n = 7) did not respond to this question. Wash water temperature was not monitored by 83% of respondents. The 17% of respondents who monitored wash water temperature just checked to make sure that it was cool to the touch.
- Most respondents (77%) dried greens, by spin (55%) or drip drying (39%), while 6% (n = 2) used towels (multiple methods were used by respondents). Similarly, 67% of respondents stored greens in coolers (26% did not store greens and 7% did not answer), and 75% of those respondents who stored greens in coolers checked cooler temperatures.
- d. Coliform levels for all lettuce mix samples were low or in the normal range (less than 4 log colony forming units per gram of sample), regardless of sanitizer use or storage temperature. *E. coli* was not detected on any samples collected from farms. It was detected on only one sample from a farmers' market vendor. *Salmonella* was detected on a sample from one farm collected directly from the field, but was undetected on washed samples from the same farm. A few samples tested positive for *Listeria*, but not *Listeria monocytogenes*.
 - e. Twenty-two farmers attended the workshop session at the MN Fruit and Vegetables Growers 2015 conference in which the results from this study were described (**Target: 50 farmers**). All attendees were Caucasian and over 21 years of age.

Conclusions:

Survey results suggest to us that soil amendments are an unlikely source of risk for food outbreaks from local farms. Our microbiological results were similar to those found for vegetables sampled from small-acreage vegetable farms in the southern USA and Maryland and from farmers' markets in Vancouver, British Columbia. Risk of foodborne outbreaks is low from locally-grown leafy greens, although improvements and farmer vigilance in using GAPs is still necessary.

Recommendations:

Sanitizer in wash water should be used as a precaution because although total coliforms levels were low or normal, some samples neared the excessive level of 4 log colony forming units per gram of tissue and *E. coli* was still found on a farmers' market sample. Future GAPs educational events should emphasize worker training and hygiene, as well as keeping farm operations clean and tidy.

6. Present the significant contributions and role of project partners in the project.

Project partners included project principal investigators and farmer collaborators. The principal investigators planned the original experimental design and protocols, contacted farmers, hired student workers, obtained Institutional Biosafety permission for the work, ensured that workers followed Institutional Biosafety regulations, surveyed farmers, collected samples from farms, completed microbiological testing, managed the project budget, wrote reports, a manuscript for submission to a peer-reviewed journal, and an article for farmers, as well as presented results at conferences.

Farmer collaborators provided suggestions for the experimental design, grew and processed leafy greens, and provided information on postharvest practices for leafy greens. One of the farmer collaborators suggested that some of the farms wash lettuce in water with sanitizer and in water without sanitizer, in order to provide a more direct comparison of the effects of sanitizer use on human pathogen levels in lettuce. Four farms agreed to this change in experimental design for August, September, and October harvests. Project partners recommended changes to experimental design at the Upper Midwest Fruit and Vegetable Growers annual conference. One collaborating farm hosted a food safety training field day.

GOALS AND OUTCOMES ACHIEVED

7. Supply the activities that were completed in order to achieve the performance goals and measurable outcomes for the project.

Goal 1 – increase knowledge and understanding of postharvest needs and practices used by local growers.

We surveyed about their postharvest and GAPs practices, and collected data on human pathogen microbiological data on locally-grown leafy greens.

Goal 2) Enhancement of farmer educational programs, train-the-trainer GAPs programming, and GAPs workshops.

- Tong, C. & Schermann, M. (Jan 2015). Leafy greens harvesting and food safety. Upper Midwest Fruit and Vegetable Growers Conference (MFVGA). St. Cloud, Minnesota. N=22
- Tong wrote article in Upper Midwest Fruit and Vegetable Growers Newsletter about the results of the study. N= circulation approximately 1200 people with about 2/3 being vegetable producers.
- Results of study posted on On-Farm GAPs Education Program website <http://safety.cfans.umn.edu/other-projects/leafy-greens-research>.
- Schermann included the study results and recommendations in 3 GAPs presentations (n=33) to growers and 2 GAPs Train-the-Trainer (n=15) workshops and added more discussion about packhouse sanitation and sanitizer selection and use. Basic message is “Postharvest practices can decrease or increase bacteria levels. Use sanitizer as insurance.”

Performance measure – numbers of farmers indicating increased knowledge gain and usage of GAPs:

Quantitative results: We used a pre- and post-test at the workshops. Evaluation results from the workshops were positive and group mean scores (1 = not confident to 5 = very confident) increased in all categories of grower-attendee's confidence in their ability to write a food safety plan (3.47 to 4.38), conduct a self-audit on their farm (3.43 to 4.48), know where to go to get food safety help (3.67 to 4.48), and answer basic questions about food safety principles to employees on their farm (3.52 to 4.29).

Qualitative responses: When asked, “As a result of this workshop, what new practices will you implement?” responses were: Washing b-4 picking, washing often, cleanliness, Field handwashing, creating more stations, SOP labeling, Many

improvements in many areas have to go through, Setting SOP, Establish/Complete General Plan, Safety Plan/GAPs, Better SOP implementation, Handwashing station, Triple rinse with sanitizer, field handwashing station, stainless steel triple sink, SOPs for all equipment/harvesting, Change location of compost, increased consideration of where birds perch, Field sanitation and packing station. How to safely have chickens and produce together, More logs and journals, SOPs, thinking more about risk assessments, Sanitation, water testing, SOP, washing practices, cleaning practices, and improving record keeping, Writing SOPs, Sanitizing more, write out SOPs, train employees w/written materials, not just verbal, More cleaning of materials for harvesting, surfaces in packing and containers, Better cleaning, Storage, All, Post harvest handling, Log sheets, Water testing, More sanitation watchfulness, SOPs, Sanitizing more, write out SOPs, Train employees w/ written materials not just verbal.

8. *If outcome measures were long term, summarize the progress that has been made toward achievement. Outcome measures were not long term.*
9. *Provide a comparison of actual accomplishments with the goals established for the reporting period.*

Goal 1 – increase knowledge and understanding of postharvest needs and practices used by local growers.

We surveyed 39 leafy greens growers about their postharvest and GAPs practices, and worked with 14 **(Target: 5-10)** farmers to obtain human pathogen microbiological data on locally-grown leafy greens.

Goal 2 – enhance farmer educational programs, train-the-trainer GAPs programming, and GAPs workshops.

Field days were held at three collaborating farms on recommended food safety practices **(Target: 2 field days)**.

10. *Clearly convey progress toward achieving outcomes by illustrating baseline data that has been gathered to date and showing the progress toward achieving set targets.*

We targeted 5-10 farms with which to collaborate on obtaining microbiological contamination data. We targeted 2 field days for dissemination of data and recommended GAPs practices. We met our targeted goals.

BENEFICIARIES

11. *Provide a description of the groups and other operations that benefited from the completion of this project's accomplishments.*

The primary beneficiaries are specialty crop growers in Minnesota, who now have a greater understanding of on-farm food safety and are more likely to embrace food safety practices on the farm and have food safety plans, which may bring them more markets and opportunities to sell their produce.

Twenty-two (n=22) farmers attended the workshop session at the MN Fruit and Vegetables Growers 2015 conference in which the results from this study were described.

Schermann included the study results and recommendations in 3 GAPs presentations (n=33) to growers and 2 GAPs Train-the-Trainer (n=15) workshops and added more discussion about packhouse sanitation and sanitizer selection and use.

In-person beneficiaries n=70.

12. *Clearly state the quantitative data that concerns the beneficiaries affected by the project's accomplishments and/or the economic impact of the project.*

Besides the quantitative survey data mentioned above in section 5 Significant Results, quantitative microbiological data was obtained and is described below.

In 2014, all of the eight participating farms used organic methods. Half of the farms used sanitizer in wash water and the other half did not. Three of the farms agreed to wash samples with and without sanitizer after the first sampling date. No *Salmonella* or *E. coli* was detected in any samples. Two samples were presumptive positive for *Listeria* spp., but species identification was not performed to determine the presence of *Listeria monocytogenes*,

the species that causes listeriosis. The levels of coliforms were all less than 4 log colony forming units (CFU) per gram of lettuce, which is the low end of “excessive” levels. There were no significant differences among farms or among treatments within a farm.

In 2015, the six participating farms used conventional fertilizer or composted dairy, chicken, or goat manure or peat as soil amendments. All farms washing greens used potable water without added sanitizer and spun dry the greens. No *E.coli* was detected in any of the farm samples. *Salmonella* was detected in only one out of five samples from one farm's field samples; no other farm samples tested positive for *Salmonella*. *Listeria* was detected in some field and washed samples, but all of the *Listeria* positives were negative for *L. monocytogenes*. Coliform counts were all below 2 log CFU/g with standard, and did not differ among treatments in any of the farm samples.

Salmonella, *E. coli*, and *Listeria* were detected on a few samples obtained from farmers' markets. None of the *Listeria* samples were positive for *L. monocytogenes*. Total coliform counts were slightly higher on some farmers' market samples compared to samples collected directly from farms, but still less than 4 log CFU/g.

LESSONS LEARNED

13. *Offer insights into the lessons learned by the project staff as a result of completing this project. This section is meant to illustrate the positive and negative results and conclusions of the project.*

The project staff was surprised to learn that many of the leafy greens growers who responded to the survey did not use fertilizer, and that microbial loads were undetectable or low on greens harvested from farms using composted manure and on where free-roaming animals were found. Although normal ranges of total coliforms were generally found on farmers' markets samples, one sample did show total coliforms levels that were nearly excessive, as well as *E. coli* contamination. We conclude that although risk from locally-grown greens is low, farmers should add sanitizer to wash water to ensure low levels of contamination from human pathogens.

14. *Provide unexpected outcomes or results that were an effect of implementing this project.*

It was a bit surprising that samples collected directly from farms had lower total coliforms levels than samples collected from farmers' markets. This result may be due to lack of accessibility to cold storage facilities by farmers' market vendors, who, in Minnesota, tend to be immigrants. Also, many of the farmers' market vendors do not spin dry greens, whereas a majority of the farmers who collaborated on field sampling used spin dryers.

15. *If goals or outcome measures were not achieved, identify and share the lessons learned to help others expedite problem-solving.*

All project goals were achieved.

16. *Provide additional information available (i.e. publications, websites, photographs) that is not applicable to any of the prior sections.*

Data obtained in this study have been written and submitted for publication to the Journal of Extension. A summary of the results has also been written for distribution to growers through the Minnesota Fruit and Vegetable Growers Association newsletter and the Yard and Garden News.

Project 5

MN Specialty Crop Block Grant – Federal Fiscal Year 13 FINAL PERFORMANCE REPORT

Submitted by: Linda Kinkel

E-mail: kinkel@umn.edu

Date: December 12, 2016

PROJECT TITLE

1. Biological and nutrient-based management of soilborne diseases in potato

PROJECT SUMMARY

2. *Provide a background for the initial purpose of the project, which includes the specific issue, problem, or need that was addressed by this project.*

Soilborne diseases on potato represent a significant challenge to potato production. Fumigation has been used to provide protection against some soilborne pathogens, but is costly and has substantial non-target effects. There have been promising results in control of both potato scab and verticillium wilt using inoculative biological control and organic soil amendments, but results have been inconsistent. Our work focuses on the use of soil carbon amendments coupled with microbial inoculants, with the goal of reducing the inconsistency of biological disease suppression. The purpose of our work is to reduce losses to soilborne plant pathogens in potato production systems by the development of innovative, low-cost, and sustainable management strategies.

3. *Establish the motivation for this project by presenting the importance and timeliness of the project.*

The on-farm value of potatoes in Minnesota is well over \$100 million per year. However, fumigation costs of \$200 per acre or more represent a significant cost for potato growers, and fumigation fails to provide long-term disease control. Our work seeks to develop sustainable long-term approaches to soilborne disease suppression that reduce or eliminate reliance on fumigation. This work is particularly timely given the potential phase-outs of diverse fumigants in agriculture. Moreover, the results of this work offer potential for reducing costs of soilborne disease management in potato by minimizing investments in fumigation and developing more long-term sustainable management approaches.

4. *If the project built on a previously funded project with the SCBGP or SCBGP-FB describe how this project complimented and enhanced previously completed work.*

The project was not based on previously-funded SCBGP or SCBGP-FB projects.

PROJECT APPROACH

5. *Briefly summarize activities performed and tasks performed during the grant period. Whenever possible, describe the work accomplished in both quantitative and qualitative terms. Include the significant results, accomplishments, conclusions and recommendations. Include favorable or unusual developments.*

We established two years of field trials at two locations in Minnesota (UM Becker Sand Plain Research Station and UM Rosemount Research and Outreach Center). We planted potatoes into plots that had been in potato, soybean, wheat, or fallow the previous season, and repeated the plantings in a second season. In field trials, we inoculated *Streptomyces* and *Bacillus* isolates, alone and in combination, in a randomized complete block design at each location. Soils were inoculated at planting on an inert carrier. Potatoes (variety Red Norland) were grown in the plots and managed under standard production conditions (irrigation, nitrogen/nutrient management, and foliar pathogen, weed, and insect management). Potatoes were harvested in August. We found significant reductions in potato scab with microbial inoculants at both locations. In addition, we found significant enhancements in crop yield at one location following inoculation, but not with carbon amendments. However, there was limited Verticillium wilt in either of our field plots, so no

results were available on effects of treatments on wilt disease. Soil nutrient and microbial community analyses have not yet been completed.

We established carbon treatments separately from the microbial inoculants in summer, 2015. In Fall, 2014, we treated soils with a fall carbon application. In Spring, 2015, we added a second carbon treatment, resulting in a randomized complete block experimental design with 4 treatments: Fall carbon, Spring carbon, Fall + Spring carbon, and no carbon. Potatoes were planted in all plots and managed and harvested as described above. Microbial inoculants and carbon amendments both significantly reduced disease at both locations. Soil nutrient and microbial community analyses show significant shifts in soil microbiome composition in response to both inoculants and carbon amendments; these results are currently being prepared for publication.

Results of our work were presented at the Area I and II Potato Growers Annual Field Day in July, 2015, and in July 2016, and were reported at Minnesota Area II Potato Growers Fall Meeting in Alexandria, MN (December, 2015 and November, 2016). In addition, results of our work were presented at the American Phytopathological Society National Meetings (July, 2016), as well as at the Seed Technologists Annual Meeting (December, 2015). There were approximately 60 growers at the Area II Field day in July, and 25 in the Area II Fall meeting in November.

6. Present the significant contributions and role of project partners in the project.

Project partners have been significant sources of support, including field station crew who helped establish and maintain plots at two locations. Perhaps most importantly, local potato growers have donated potatoes used for seed in this work and in related greenhouse studies.

GOALS AND OUTCOMES ACHIEVED

7. Supply the activities that were completed in order to achieve the performance goals and measurable outcomes for the project.

We established multiple-season field trials at two locations in Minnesota.

We performed extensive growth chamber and greenhouse trials to evaluate soil carbon and microbial amendment effects on plant diseases.

We evaluated soil microbial community capacities to suppress plant pathogens.

We characterized soil microbial community composition following carbon amendments and microbial inoculants.

We quantified plant diseases (scab, Verticillium wilt) and potato yields in field trials using microbial inoculants alone or in combination with soil carbon amendments.

8. If outcome measures were long term, summarize the progress that has been made towards achievement. Anticipated outcomes

1. Reduced potato scab incidence and severity. We obtained significant reductions in both potato scab incidence and severity with our soil microbial management.

2. Reduced Verticillium wilt incidence and severity. We obtained significant reductions in Verticillium wilt incidence and severity in our field trials.

3. Enhanced marketable potato yields. We were able to obtain significant increases in marketable potato yields in our field trials of microbial inoculants and soil carbon amendments.

4. Reduced reliance on fumigation as a disease control strategy in potato production systems. Our soil treatments offer a pathway to reduced reliance on fumigation as a disease control strategy, yet challenges in scaling-up inoculum production remain to be solved.

5. Increased understanding of the factors that influence potato yields and suppression of scab and wilt in potato production systems. Analyses of microbial community composition in relation to yield and disease suppression remain ongoing; these results will shed significant light on the factors that influence potato yields and both scab and Verticillium wilt.

9. Provide a comparison of actual accomplishments with the goals established for the reporting period. We accomplished the goals established for the reporting period.

10. Clearly convey completion of achieving outcomes by illustrating baseline data that has been gathered to date and showing the progress toward achieving set targets.

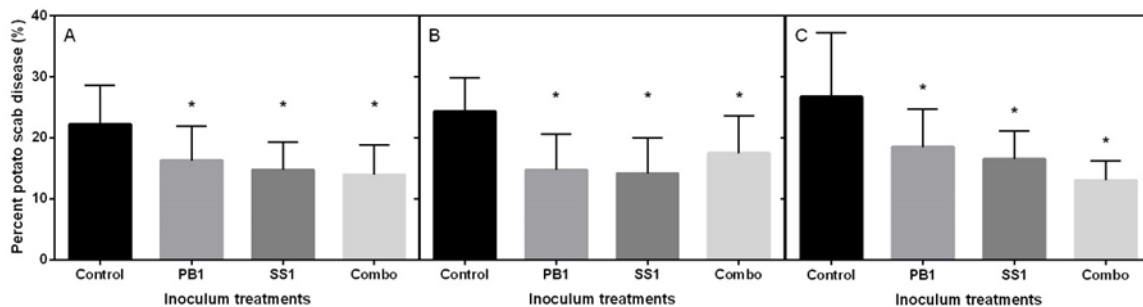


Figure 1. Potato scab disease severity (%) following inoculation of individual microbes (PB1 or SS1) or their combination. Data from 2015 field trial at the University of Minnesota Sand Plain Research farm (Becker, MN); (*) denotes a significant reduction in disease based on the statistical analysis ($p < 0.05$). Panel A represents plots in a potato-potato rotation; panel B represents plots in a soybean-potato rotation; and panel C represents plots in a wheat-potato rotation. Over all rotations, PB1 reduced disease on average 32% over the control, while SS1 and the combination reduced disease 39% over the noninoculated control.

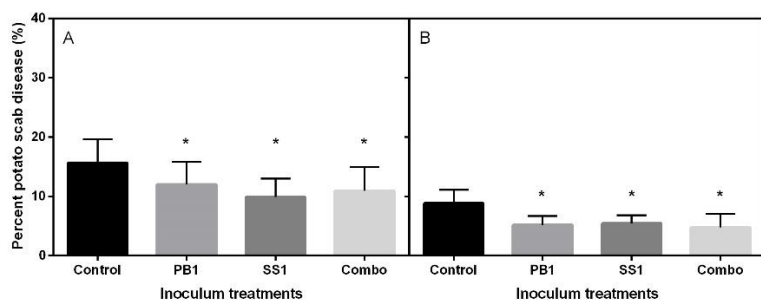


Figure 2: Figure 1. Potato scab disease severity (%) following inoculation of individual microbes (PB1 or SS1) or their combination. Data from 2015 field trial at the University of Minnesota UMORE Park (Rosemount, MN); (*) denotes a significant reduction in disease based on the statistical analysis ($p < 0.05$). Panel A represents plots in a potato-potato rotation; panel B represents plots in a soybean-potato rotation. Over all rotations, PB1 reduced disease on average 31% over the control, while SS1 and the combination reduced disease 37% over the noninoculated control.

BENEFICIARIES

11. Provide a description of the groups and other operations that benefited from the completion of this project's accomplishments.

Groups to benefit from the project accomplishments are, hopefully, potato producers in both large-scale and smaller-scale, organic production systems across the upper Midwest. This will rely upon our capacities to establish effective large-scale inoculum production approaches.

12. Clearly state the quantitative data that concerns the beneficiaries affected by the project's accomplishments and/or the potential economic impact of the project.

Fumigation costs \$200-300/acre, and fumigation is commonly repeated every 3-4 years. However, fumigation can increase potato yields 70 cwt/acre, which can translate to >\$500/acre in returns. Thus, approaches to reduce the frequency of fumigation, and to simultaneously reduce soilborne diseases, have significant potential economic impacts. We hope to capture these benefits by scaling-up our inoculum capacities to support large-scale grower utilization.

LESSONS LEARNED

13. Offer insights into the lessons learned by the project staff as a result of completing this project. This section is meant to illustrate the positive and negative results and conclusions for the project.

We have been able to document the benefits of microbial inoculants for potato production at multiple locations in Minnesota. This is an exciting opportunity. However, the challenges to translation of these results to large-scale production systems remain daunting in the absence of commercial partners. Research scientists at the University are not well-positioned to translate these results to a commercial product. However, we are working actively with partners to explore strategies for translating our results to production systems on a large-scale.

14. *Provide unexpected outcomes or results that were an effect of implementing this project.*

To date, there are no unexpected outcomes or results.

15. *If goals or outcome measures were not achieved, identify and share the lessons learned to help others expedite problem-solving.*

Short-term outcomes have all been accomplished. However, long-term outcomes remain to be achieved. In particular, the capacity to scale-up inoculant production to achieve the volumes necessary to support large-scale application across Minnesota potato production systems remains a target of our research.

ADDITIONAL INFORMATION

16. *Provide additional information available (i.e. publications, websites, photographs) that is not applicable to any of the prior sections.*

Project 6

MN Specialty Crop Block Grant FINAL PERFORMANCE REPORT

Submitted by: Jan Joannides

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Date: 08/05/15

PROJECT TITLE

1. Provide the project's title: Igniting Regional Support of Locally Grown Specialty Crops

PROJECT SUMMARY

2. Provide a background for the initial purpose of the project, which includes the specific issue, problem, or need that was addressed by this project.

The purpose of this project was to expand markets and increase sales of specialty crops in southern Minnesota. We undertook this project because we knew that farmers in the region were interested in expanding their sales but lacking connections to buyers. This issue was documented in a study conducted in 2013 of producers in southeast Minnesota. The findings of the research also reflected our interactions with growers.

A second issue this project addressed was the lagging regional interest in locally-grown specialty crops. While interest in "local foods" was expanding across the state, growth was much less robust outside of the Twin Cities area. By focusing the festival in southern Minnesota, we sought to raise awareness of and increase interest and demand for local specialty crops both from individual consumers and from intermediate buyers (restaurants, hospitals, school food service, caterers, and grocers).

3. Establish the motivation for this project by presenting the importance and timeliness of the project.

We selected southern Minnesota for this event and campaign because of a unique window of opportunity. Efforts to grow a strong regional food system had been accelerating in this part of the state. The University of Minnesota Extension's Southeast Regional Partnership was catalyzing efforts around local food systems and helped launch the Southeast Healthy Food Alliance. The Southern Minnesota Initiative Foundation (SMIF) had released a study on the potential of local foods as economic drivers in the region. In response to that study, SMIF initiated a Collaborative Impact process that led to the creation of the FEAST Local Food Network. Added to this mix was the decision by the Minnesota State Legislature to provide \$585 million to the region for infrastructure related to the development of Destination Mayo Medical Center – which in our minds could provide opportunities for local foods. With all these things happening, we saw an opportunity to ignite the efforts of multiple organizations and individuals who have been working on these matters, and do so in a way that benefits specialty crop producers.

4. If the project built on a previously funded project with the SCBGP or SCBGP-FB describe how this project complimented and enhanced previously completed work. NA

PROJECT APPROACH

5. Briefly summarize activities performed and tasks performed during the grant period. Whenever possible, describe the work accomplished in both quantitative and qualitative terms. Include the significant results, accomplishments,

PROJECT ACTIVITY & TASKS-SUMMARIZED	WHO
Convene partner organizations, identify advisory committee and potential sponsors.	Twenty organizations and over 60 individuals participated in designing and implementing the festival and tradeshow and the accompanying outreach and promotion of specialty food businesses. An additional 15 organizations joined on as financial or media sponsors.
Contact growers and buyers to determine best dates and times for trade show and expo. Secure venue.	We made these contacts and based on the feedback and the availability of the venue (the Rochester Civic Center), we selected November 2 & 3, 2014 for the event.
Convene advisory committee and form subcommittees: Producer recruitment, buyer recruitment, media relations, workshops, logistics, and volunteers.	Our final subcommittees were Exhibitors/Jury, Festival, Tradeshow, Logistics, Marketing & Communications. These committees met throughout the year prior to the event.
Develop marketing and outreach strategies and materials.	We developed an extensive marketing and outreach strategy. Our materials included a save the date postcard, promotional poster, direct mail letter and flyer, e-newsletters, e-blasts, ads for newspapers, radio, social media and billboards, and a video.
Hire evaluator and public relations contractor.	<p>We hired a team of people to conduct public relations. Our strategy was to have a team that was spread across the region so that they could target regional areas. This helped us not only generate content from those areas (i.e. stories for producers who would be at the Feast event), but also connect with local media to run the stories and promote the event.</p> <p>We had three groups conduct the evaluations. The “day of event” evaluation with producers and buyers was designed and analyzed by the planning team. Two Oregon State University researchers conducted a “dot survey” on the day of the festival with the general and provided analysis of that survey. We hired Organic Processing Institute to conduct the follow-up survey of exhibitors and buyers who attended the event.</p>
Recruit producers, buyers, and presenters for trade show and public expo..	<p>We completed our recruitment as planned. We estimate that we reached at least 1,000 specialty crop producers, and 100 participated in the event either by being an exhibitor or by having their products featured in one of the products showcased. Our recruitment included ads in producer media, save-the-date cards, e-blasts, social media, and personal invitations from the planning team members.</p> <p>We used lists from agencies in Minnesota, Wisconsin and Iowa to identify buyers and sent over 500 companies an invitation to attend the event. We also ran ads in Food Service News. We had 73 businesses sign up to come, representing 173 individuals, but our final numbers were much lower. We estimate we had at least 50 buyers representing 30 grocery stores, specialty food stores, coffee shops, restaurants, caterers, food co-ops, and schools.</p> <p>We recruited a range of individuals to present – from industry professionals presenting on the tradeshow days, to local chefs doing cooking demos on the festival day.</p>

conclusions and recommendations. Include favorable or unusual developments.

Conduct marketing campaign.	We had a three-tiered marketing plan. This included marketing to producers, to buyers, and to the general public. Above we mention the producer and buyer recruitment. Marketing to the general public was conducted by our 11 person marketing team, with assistance from many of the partner organizations. The campaign included buying paid advertisements, pitching stories to the media, and extensive online outreach through email, facebook and twitter.
Conduct surveys with producers signed up for event.	We determined that we'd get a better response rate if we did evaluations, on the day of the event, and that is what we did.
Hold Local Foods Trade Show and Expo	The tradeshow and expo were held on Nov 2 and 3, 2014. We had 107 exhibitors, at least 40 buyers, and over 1500 people at the public festival.
Calculate media impressions.	We had media coverage (earned or paid) in 64 print or radio outlets in Minnesota, Wisconsin and Iowa. We conservatively estimate that we had over one million media impressions. We also had billboards in Rochester and Mankato. On August 2, 2014 we had 126 facebook likes for the event. By November 4, 2014, we had 1,243.
Conduct event evaluation.	<p>Evaluations for exhibitors and buyers were developed by the planning team. Exhibitors received two evaluations – one for the tradeshow day and one for the festival day. We had exhibitor hosts that helped groups of exhibitors and made sure they got, completed, and returned the evaluations. Buyers were also given an evaluation form to complete, but it was more difficult to get them to turn them in because they came and went throughout the day.</p> <p>On the public day, two researchers from Oregon State University came and conducted a dot survey with members of the general public that attended. As people were leaving, they asked them to answer a five brief questions. The results were analyzed.</p>
Conduct surveys of producers and buyers participating in trade show and event.	Our contractor, Organic Processing Institute, developed, implemented an analyzed a survey for exhibitors and a separate survey for buyers. These surveys were done several months after the event. They also conducted phone interviews with a handful of exhibitors and buyers to collect more detailed information.
Complete final report and share results.	We completed a final report that we have shared with partner organizations and sponsors.

The Feast Festival and Tradeshow was a major undertaking that involved nearly 35 organizations and over 60 individuals to plan and execute – not including all of the exhibitors, speakers, or day-of-event volunteers. While having such an extensive team may have slowed down the process initially, it provided a wide variety of expertise and on-the-ground contacts across many communities, which helped drive local buy-in.

In addition to the funds provided by SCBGP, we were able to raise nearly \$90,000 in sponsorships and other grant funds. The organizations involved also contributed a significant amount of work on the project on an inkind. We estimate that nearly \$100,000 was contributed inkind.

While FEAST Festival and Tradeshow took place on November 2 & 3, 2014, the publicity campaign started over eight months before that. We developed a website for the event and conducted an expansive campaign that included advertising in print publications and on the radio, Internet, and billboards. We also developed a series of stories that were pitched to media and picked up by numerous outlets. We also had a short video produced to drive traffic to the website and the event. A direct mail campaign was used to reach buyers for the tradeshow portion of the event.

We exceeded our goals for numbers of exhibitors and public attendees. We did find that getting exhibitors to sign up was more challenging than we expected. When our initial efforts only led to a couple dozen sign-ups, we had to change our strategies and intensify our efforts. This included numerous members of the planning committee reaching out one-on-one to potential exhibitors. In the end, we ended up with 110 exhibitors, with over 40 of which were specialty crop businesses, and a number of these represented multiple specialty crop producers (such as farmer co-ops and food hubs). Some of the exhibitors, while

not themselves specialty crop businesses themselves, used local/regional specialty crop in their food products (e.g. jams, shrubs, sauces...). Overall, we estimate 100 specialty crop producers were represented in some way at the event.

Our attendance on the festival day was near 1,500. When we add in exhibitors and speakers, we had nearly 2,000 participants. That number was higher than we had targeted in the grant.

We had not set a goal for number of buyers that we hoped to attract in the grant proposal. Buyers from 73 companies signed up to come. While not all buyers came, and some companies sent multiple buyers, our estimate is that over 50 buyers came to the event representing at least 30 companies.

The general feedback on the event (from sources who we have talked with or heard from) has been very positive. There were compliments on the event being run well, on the turnout, and on the connections made. Several people expressed how grateful they were that an event like this was held, and that it was long overdue.

6. Present the significant contributions and role of project partners in the project.

We had many partners in this effort. The other lead organization was the Southern Minnesota Initiative Foundation. They were key in bringing together other partners, garnering support from sponsors and communities alike, providing additional financing, and co-planning the event. Other partners involved in planning and implementation of the event were: AURI, Cannon Falls EDA, Channel One, Community and Economic Development Associates, Kwik Trip, Lanesboro Local, Living Greens, Minnesota Department of Agriculture, Olmsted County Public Health, Organic Processing Institute, People's Food Co-op, Region Nine Development Commission, Rochester Convention & Visitors Bureau, Rural Advantage, UM SE Sustainable Partnership, USDA Rural Development, and Winona County. These partners took on a variety of responsibilities, from reviewing exhibitor applications, to securing sponsors, to coordinating volunteers.

We had numerous organizations support the event through financial contributions. These included: Mayo Clinic, Minnesota Department of Agriculture, Southern Minnesota Initiative Foundation, UM SE Sustainable Partnership, Renewing the Countryside, Blue Cross Blue Shield, Hormel Foods, AgStar Financial Corporation, Kwik Trip, Organic Processing Institute, Region Nine Development Commission, USDA Rural Development, Cannon Falls EDA, Seneca Foods, People's Food Co-op, Organic Valley, Just Food Co-op, St. Peter Food Co-op, Oneota Community Food Co-op, Bluff Country Food Co-op, MN SARE, Carleton College, H Brooks & Company, HyVee, Living Greens, Kalona Organics, The Minnesota Cup, and our media sponsors Post Bulletin and Fairway.

The success of the initial event has led the partner organizations to move forward with a second event to be held in December of 2015. We have nearly raised the funds needed for this event and are well into the planning.

GOALS AND OUTCOMES ACHIEVED

7. Supply the activities that were completed in order to achieve the performance goals and measurable outcomes for the project.

See table provided for #5 above for activities.

Benchmark: Number of business relationships specialty crop producers have with non-individual buyers one month prior to the event

Target: 100 new producer-buyer relationships

Our methodology for determining this number involved surveying both exhibitors (those selling product) and buyers 4 months after the event and having them self-report the number of new business relationships they made. We had 60 exhibitors (50%) respond and 38 buyers (of an estimated 50 to 90) respond. We did not distinguish specialty crop product companies from others, but did ask a question to determine how many of the surveys came from companies that had included specialty crops. 13 of the 60 respondents indicated they grow specialty crops and 26 indicated that they use locally-sourced specialty crops as ingredients.

Of the 54 Feast exhibitors who answered the question, 14 indicated the event led them to open at least 1 new account; 6 indicated 2 new accounts; 3 indicated 4 new accounts; 2 indicated 5 new accounts; and 1 indicated >5 accounts. That adds up to over 60 new business relationships. That is below our estimated 100, but 1) it also only includes half of the businesses participating in the survey; and 2) it doesn't differentiate between specialty and non-specialty crop companies.

However, in addition to the deals made, 28% of respondents also indicated that they thought the contacts they made at the event would lead to other sales connections.

Finally, we also know from first-hand reports that there were buyer-producer relationships made amongst exhibitors. A berry producer talked with a jelly maker and exchanged information. A nut grower talked with a chocolate maker. As we are continuing this event, we are continuing to gather data to help us get a better picture of the impacts.

One important impact is that the Mayo Clinic - in their second year of supporting this project, went to their food service company (Sodexo) and pushed for them to do more local foods on their menus. While last year, no one from Sodexo attended, in 2015 there were 9 Sodexo staff at Feast on the buyers day.

8. If outcome measures were long term, summarize the progress that has been made towards achievement.

In the follow-up survey to exhibitors – 54 percent indicated that they had found new wholesale buyers because of the show. Another 20 percent were not yet sure whether or not the connections they made would translate into accounts.

9. Provide a comparison of actual accomplishments with the goals established for the reporting period.

Goal	Performance Measure	Target	Actual
1: Increase the public's awareness of locally-grown specialty crops	Number of people who attend the Food Trade Show and Expo	800 people	1,500 (does not include exhibitors, speakers volunteers)
	Media Impressions	300,000	>1 Million
2. Increase the number of buyers that participating specialty crop producers sell to.	Number of specialty crop producers participating in trade show and expo.	80	We estimate over 100 specialty crop producers participated – either by having their own exhibit, being a part of an exhibit, or having their crop featured in a product showcased.
	Number of new business relationships formed	100	Collection of info in process.

10. Clearly convey completion of achieving outcomes by illustrating baseline data that has been gathered to date and showing the progress toward achieving set targets.

As this was a first event, baseline data for number of exhibitors, number of attendees, and number of buyers was all zero, so the progress is documented in the numbers shared in the above chart.

BENEFICIARIES

11. Provide a description of the groups and other operations that benefited from the completion of this project's accomplishments.

The main beneficiaries for this project were specialty crop producers who were able to showcase their products to direct buyers at the Feast! Festival and to wholesale buyers at the Feast! Tradeshaw. These producers received additional promotion through the marketing campaign that led up to the event. We also provided some of these producers with one-on-one technical assistance to help them better promote their products.

We anticipate 100 specialty crop producers participated in the event either by being an exhibitor or by having their products featured in one of the products.

The response from the surveys indicated sales on the public day of the event; new business relationships made with buyers; and an overall positive rating on the event

Of the buyers who responded to the survey, 15 provided an estimate of how much they would spend annually on new accounts they made at the event. The total was \$34,000.

We anticipate that there are ripple effects of this work. For example, one of the regional economic development organizations has become interested in doing more work around local foods. Another community is working on ways

to be a “hub” of local foods related businesses. A number of organizations involved have been working together to help businesses - including specialty crop businesses - to find financing resources to expand their businesses. And as mentioned above, even larger entities in the region, like the Mayo Clinic, are paying more attention to their food sourcing practices.

12. Clearly state the quantitative data that concerns the beneficiaries affected by the project’s accomplishments and/or the potential economic impact of the project.

As mentioned above, over 54 percent of exhibitors who responded indicated that they developed new accounts as a result of this project and another 20 percent were unsure at the point of the survey. 99 percent of the exhibitors who participated indicated they would return if the event was held again.

LESSONS LEARNED

13. Offer insights into the lessons learned by the project staff as a result of completing this project. This section is meant to illustrate the positive and negative results and conclusions for the project.

Collaboration takes time, but it is worth it! We set out to do this project with the expectation that we would have a lot of organizations and individuals involved. We knew there was a lot of interest and support for growing the local foods economy, especially around specialty crops, and we wanted wide engagement. That happened! The process went remarkably smoothly, but there were times that various partners got impatient and times that we all didn’t have consensus on a direction. That said, we kept meeting and talking and planning, and in the end were all pleased with the result.

There is a continuum of understanding of local/regional foods – and you have to meet people where they are at. In the process of implementing this work we realized that people had a wide understanding of local/regional food. This included both members of the planning committee, those who applied to exhibit, and the general public. This event provided us a table to have discussions about these issues.

14. Provide unexpected outcomes or results that were an effect of implementing this project.

While we anticipated that producers and buyers would make connections, we didn’t anticipate the value of the peer-to-peer networking. That item was mentioned in the evaluations as a very important outcome. Exhibitors made supply chain deals, equipment deals, and garnered useful information from those interactions.

The first year of the event was well received, and that has resulted in new doors opening for the second year of the event. A number of those involved have been asked to speak at association meetings, at community service club meetings, and to the media about what happened in 2014 and plans for 2015.

15. If goals or outcome measures were not achieved, identify and share the lessons learned to help others expedite problem-solving.

ADDITIONAL INFORMATION

16. Provide additional information available (i.e. publications, websites, photographs) that is not applicable to any of the prior sections.

Articles, photographs, exhibitor list can all be found at:
<http://2014.local-feast.org>

Supplemental reports are attached. Please note that while the event included products beyond Specialty Crops (and all products are indicated in the reports), we clearly covered those costs with other sources of funds.

Project 7

MN Specialty Crop Block Grant – Federal Fiscal Year 13

FINAL PERFORMANCE REPORT

Submitted by: Pete Huff

E-mail: phuff@iatp.org

Date: May 15, 2015

PROJECT TITLE

1. Farm to School/Childcare Curricula to Promote Minnesota's Specialty Crop Growers

PROJECT SUMMARY

2. *Provide a background for the initial purpose of the project, which includes the specific issue, problem, or need that was addressed by this project.*

Minnesota's specialty crop growers have gained significant access to schools with the Farm to School (F2S) movement, particularly over the past five years. F2S isn't just about food, however, it is about promoting local agriculture. We believe that the best way to keep expanding opportunities for specialty crop farmers is to complement what's happening in the cafeteria with learning in the classroom. In the classroom we can help students connect the F2S and Farm to Childcare (F2CC) experience with the work of our local growers. This insight led us to develop age-appropriate classroom curricula for both F2S and for F2CC. This grant supported outreach, education and training on these curricula with teachers and childcare providers; establishment of a Farm to Childcare Leadership Team; the expansion our F2CC curricula to be relevant to Hmong community; and outreach to farmers on specific needs related to farm to institution sales.

3. *Establish the motivation for this project by presenting the importance and timeliness of the project.*

IATP invested significant resources into developing these curricula, including identifying a national roster of reviewers for the F2S curriculum and early childhood education consultants for the F2CC curriculum. With their focus on farmers and food systems, these curricula are stand-outs in the field where most of the food-related curricula focus on nutrition. However, just creating a good resource is no guarantee that it will be used. While the curricula were still relatively new and getting attention, we realized this was the time to invest in outreach and training for educators; to create a statewide coalition to support F2CC overall; and to expand our F2CC curriculum to be relevant to the Twin Cities' Hmong community, of whom a large percentage are family farmers of specialty crops. Because of our commitment to farmers, we wanted to complement this effort with outreach to specialty crop producers to understand their experiences and needs regarding engaging farm to institution market channels within their farm business plan.

4. *If the project built on a previously funded project with the SCBGP or SCBGP-FB describe how this project complimented and enhanced previously completed work.*

Prior support from the SCBGP has been essential to this current project. Funding in 2010 allowed us to conduct research on existing F2CC programs and curricula nationwide. Through that process, we determined the need for a curriculum that focused specifically on farming and food systems. Funding in 2011 supported our F2S project that included extensive partnerships with farmers and school food service directors that provided insights into the challenges each group faces with this emerging market. In 2012 we received funding for a F2CC project in conjunction with New Horizon Academy (a for-profit childcare provider with centers throughout Minnesota). Through this grant, we developed our first F2S curriculum and established relationships with distributors who were willing to source from local farmers. What we learned through these experiences deeply influenced our approach to the curricula and outreach to both educators and farmers.

PROJECT APPROACH

5. *Briefly summarize activities performed and tasks performed during the grant period. Whenever possible, describe the work accomplished in both quantitative and qualitative terms. Include the significant results, accomplishments, conclusions and recommendations. Include favorable or unusual developments.*

Through this project we conducted outreach and training on our F2CC and F2S curricula with teachers and childcare providers, established an F2CC Leadership Team, expanded our F2CC curricula to be relevant to the Hmong community and conducted outreach to farmers on specific needs related to farm

to institution sales. We reached 254 high school teachers, 630 childcare providers and 592 farmers, and, for the most part, we exceeded our outreach goals and achieved our evaluation targets. The Hmong-focused curriculum we developed has already inspired new business for local specialty crop growers, and the outreach to farmers on farm to institution sales has provided meaningful insights that will inform our future work.

6. *Present the significant contributions and role of project partners in the project.*

In developing the Hmong cultural component of our F2CC curriculum, we partnered with the Hmong American Farmers Association (HAFA) and the Minnesota Head Start Association (Head Start). This included five in-person meetings, multiple phone calls and extensive online editing and comments throughout the spring and summer of 2014. As an association of Hmong farmers, HAFA was an ideal partner, able to bring both cultural knowledge and knowledge of farming to the curriculum. Head Start staff provided insights into both the age-appropriateness of the curriculum and how to align its structure to match the Head Start educational philosophy and performance standards, the latter of which was the first step toward engaging Head Start staff in training workshops.

In our outreach to farmers, we worked most closely with the Sustainable Farming Association of Minnesota (SFA) and Renewing the Countryside (RTC). SFA was particularly helpful in developing a strategy for this work that would be most beneficial to local farmers. When we determined a survey made the most sense, both SFA and RTC provided us with the history of other outreach efforts and how to make ours more successful. They also conducted outreach for the survey to their extensive networks, which added a legitimacy to the project that an outside organization (i.e., one that is not a membership organization of farmers) could not have achieved.

With this grant we also established the MN Farm to Childcare Leadership Team. The Team was established to bring together advocates, as well as growers and early childhood educators with an interest in promoting F2CC in Minnesota. This included four meetings where we discussed dissemination plans for the curriculum, developed a team vision and goals statement, etc. Team members include:

Marguerite Zauner, Blue Cross Blue Shield of Minnesota Center for Prevention
Natasha Frost, William Mitchell College of Law
Molly Turnquist, Minnesota Department of Education-Child and Adult Care Food Program
Stephanie Heim, University of Minnesota Extension (MN Farm to School State Lead)
Anne Dybsetter, University of Minnesota Extension
Mary Schroeder, University of Minnesota Extension
Grace Brogan, Renewing the Countryside
Lisa Gemlo, Minnesota Department of Health
Ralston Aoki, Julie Public Health Law Center
Christine Twait, Providers Choice
Deb Loy, Minnesota Department of Education
Joyce O'Meara, Minnesota Department of Health
Jeanne Dickhausen, Minnesota Department of Education-Head Start
Pakou Hang, Hmong American Farmers Association
Jamie Bain, University of Minnesota Extension

GOALS AND OUTCOMES ACHIEVED

7. *Supply the activities that were completed in order to achieve the performance goals and measurable outcomes for the project.*

Goal 1: Promote and conduct outreach for our new F2CC and F2S curricula among farmers and early childhood educators. Activities: We promoted our F2CC and F2S curricula broadly to enthusiastic feedback. We conducted general outreach through key networks including: the MN Farm to School Leadership Team; MN Agriculture Educators Association; Minnesota Association of for Career and Technical Education; Think Small (childcare resource association); the National Agriculture Educators Association; the National Farm to School Network and the MN Farm to Childcare Leadership Team, a group founded with support from this grant. (See goal #4.)

We have held 28 workshops for 254 high school teachers and 630 childcare providers. We have also engaged a larger audience through an additional 15 informal presentations at various meetings and

events where the curricula were announced and provided to those in attendance. In addition, the Farm to School webinars have all been posted on YouTube as a permanent public resource and have received 134 additional views to date.

Goal 2: Establish a survey of producers seeking to or selling to institutional markets in conjunction with the Sustainable Farming Association. Activities: Focusing on specialty crop growers in Minnesota and the surrounding states, the survey was co-designed by IATP, SFA and RTC with advisory input from over 20 different non-profit organizations, state agencies, growers and experts with experience in both farm to institution practices and surveys. This included feedback collected from in-person meetings, as well as via e-mail. The survey was heavily influenced by previous grower surveys conducted by IATP, RTC, the University of Minnesota (UMN) and others. Our survey was unique in that it focused on all institutions (e.g., K-12 schools, child care centers, hospitals, universities, government offices, etc.) as potential market channels for specialty crop growers and gauged interest in the specific information, resources and support mechanisms those growers wanted to access those markets more effectively, comprehensively and consistently. Combining existing best practice gleaned from an analysis of previous producer surveys with the feedback from a broad range of stakeholders throughout the process, we designed a comprehensive online survey of 38 questions oriented to the scale of specialty crop growers and their business needs. The survey was beta tested by a number of growers and other experts to refine language and functionality.

To officially launch the online survey, IATP conducted a promotional webinar “Building Farm to Institution Markets: Webinar and Survey!” on November 6, 2015. This webinar was aimed at Minnesota specialty crops growers and promoted to this audience via a postcard mail-out, e-mail, newsletter listings, social media postings (by IATP, SFA, RTC, and others) and e-mail list postings. Promotion was done by IATP, SFA and RTC, as well as by various members of the advisory group. Targeted promotion of the webinar and the survey was done via mailing lists, listservs, newsletters and events that predominantly serve specialty crop growers. The webinar featured an overview of farm to institution market practices and more detailed presentations from an expert panel, including Ryan Pesch, UMN-Extension educator and owner of Lida Farm; Greg Reynolds, owner of Riverbend Farm and Andrea Northup, farm to school coordinator for Minneapolis Public Schools. Ryan Pesch highlighted his research on the market potential of farm to institution in various regions of Minnesota, specifically focusing on the potential for specialty crops. Greg Reynolds spoke about how his specialty crop production has profitably engaged with institutional markets. Andrea Northup presented on the needs and drivers of food service at major institutions. The webinar was attended by 74 individuals and was positively received. After the webinar, we focused on promoting the survey to growers via the established channels. It was widely distributed and promoted via a variety of organizations and events throughout November and December 2014. The survey was open for growers to complete until December 22, 2014. In the end we received 142 responses, of which a majority were specialty crop growers.

The results of the survey were then analyzed and we developed a presentation for growers based on our findings. We presented at three different farm-focused conferences in Minnesota: the Upper Midwest Regional Fruit and Vegetable Growers Conference (January 15-16, 2015), the Sustainable Farming Association Annual Meeting (February 14, 2015) and the MOSES Organic Farming Conference (February 25-27, 2015). The overall intent of presenting preliminary information was to test the outcomes with a larger audience. The information was formatted into a PowerPoint presentation, a simple informational handout and a short feedback form to capture farmer reactions to the presented information. Depending on the event, presentations were varied and included: formal keynote presentations, informal meetings and exposition booth conversations. Regardless of format of the presentation, all presentations were evaluated via the same feedback form, provided to audiences at large events and to individuals who stopped by exposition booths. This feedback form gauged change in individual knowledge of farm to institution markets due to the presentation, as well as gathered information on current levels of farm to institution market participation and the resources and tools desired for new or expanded participation. The Upper Midwest Regional Fruit and Vegetable Growers Conference engaged an audience of 100 producers in a formal presentation; the Sustainable Farming Association Annual Meeting engaged 250 producers via an exposition booth; and the MOSES Organic Farming Conference engaged hundreds of producers via an exposition booth and a targeted group of 20 producers in a formal lunchtime presentation. Additional feedback was also gathered informally via one-on-one conversations and follow

¹ <http://www.iatp.org/event/building-farm-to-institution-markets>

up e-mails. On average, 90 percent of respondents indicated that their knowledge of farm to institution markets improved as a result of the presentation.

A summary report of the survey findings was produced and shows a positive orientation toward farm to institution markets. Three out of four respondents indicated their interest in selling their products to institutional markets in the future, with universities and hospitals identified as the most appealing markets. Respondents indicated interest in information and resources that will help orient their business practices to meet institutional volume and product demands, specifically: food hub, cooperative and/or other aggregation setup information and support; common product specification sheets and checklists for various institutions; and business planning advice for starting or expanding institutional sales. Respondents were interested in accessing information and resources on institutional markets through a mixture of in-person and online forums, including: regional farmer-buyer networking events, in-person workshops, an online producer-seller directory, informational webinars and farm visits and field days. Finally, respondents were most interested in working with other producers and existing farmer networks to expand farm to institution sales. They also showed some interest in working directly with institution staff and staff from state departments of agriculture (i.e., Minnesota Department of Agriculture).

Goal 3: Expand our F2CC curriculum to include specialty crops, activities and recipes appropriate to Hmong families. Activities: Working with our partners from Head Start and the Hmong American Farmers Association (HAFA), we expanded our F2CC curriculum package to include six additional specialty crops (Beets, Bok Choy, Eggplant, Onions, Potatoes and Watermelon) and also Hmong cultural connections, including Hmong words for specialty crops and Hmong recipes. We assembled a group of experienced Head Start teachers (some of them Hmong) for a three-hour, in-person session to review our existing F2CC curriculum, brainstorm additional activities and suggest changes to adapt it for Head Start. In addition, they created a section highlighting Hmong words for specialty crops and suggested Hmong children's books on farming.

Goal 4: Establish a F2CC Leadership Team that will promote F2CC in Minnesota on an ongoing basis.

Activities: We are pleased to report that we have established the Minnesota F2CC Leadership Team with a group of 16 advocates, growers and early childhood educators. Over the grant period, the Leadership Team has created a collegial environment where those of us working in this area can come together to coordinate our efforts to have the greatest impact in expanding Farm to Childcare in Minnesota. We have had four in person meetings so far and are planning our quarterly meetings for the future. Partners from the Leadership Team have been very helpful in connecting us with opportunities to spread the word about F2CC, and have provided a ready-made network to do outreach on Farm to Childcare-related resources, announcements, events and news. We have also connected with other Minnesota groups such as the Farm to School Leadership Team, The Child and Adult Care Food Program Advisory Committee and Minnesota Healthy Kids Action to make sure that Farm to Childcare and purchasing locally grown specialty crops are included in their planning and long term thinking about what success looks like.

8. *If outcome measures were long term, summarize the progress that has been made towards achievement.*

We did not identify long-term outcome measures.

9. *Provide a comparison of actual accomplishments with the goals established for the reporting period.*

In comparing the actual accomplishments of the project with the project goals, we see that all four project goals were met. The total number of childcare providers reached exceeded our projections by almost three times, and we achieved our target of 80 percent of respondents reporting increased knowledge. The total number of teachers reached is 254, or 72 percent of our projection and only 62.5 percent of respondents reported increase knowledge, below our target of 80 percent. When we looked at the raw data behind these numbers we noted that the Farm to School audience came in with a much higher level of knowledge of the subject than childcare providers (On the pre-tests, 72% of childcare providers reported little to no familiarity, while only 23% of high school teachers reported that level of knowledge.) Thus, we don't think the data we collected tells us as much about the perceived quality of the training workshops as we had hoped.

We are especially proud of the Hmong components of our Farm to Childcare curriculum. The Twin Cities is home to one of the largest concentrations of Hmong Americans, which includes a high percentage of Hmong family farmers. We felt it was particularly important to have a curriculum that recognizes Hmong

cultural traditions and their leadership in the local foods movement. Also, with Head Start's involvement, we were able to ensure the curriculum met their performance standards, thus it provides a "pre-approved" resource for Minnesota's 33 Head Start programs, and one that is also appropriate for any childcare program.

As a result of promoting, implementing and reporting on the preliminary results of the producer survey, we engaged more than 450 producers through a variety of in-person and electronic forums. On top of survey finding that 77.5 percent of surveyed producers being interested in future sales to institutions, our feedback on the effectiveness of the associated education process revealed that an average of 89.6 percent of respondents improved their knowledge of farm to institution markets. This success is above and beyond the goals of the project – solidifying the validity of the survey and Minnesota farm to institution practices on a whole.

10. *Clearly convey completion of achieving outcomes by illustrating baseline data that has been gathered to date and showing the progress toward achieving set targets.*

Please see evaluation results chart attached.

BENEFICIARIES

11. *Provide a description of the groups and other operations that benefited from the completion of this project's accomplishments.*

Beneficiaries of this project include high school teachers and childcare providers who we trained on our F2CC and F2S curricula; the Hmong American Farmers Association who established a relationship with Head Start centers in St. Paul, and who serve on the Farm to Childcare Leadership Team; the 142 farmers who participated in the producer survey and the hundreds of other producers who gained the outcomes of the producer survey as a tool for their farm business planning and collaborative efforts.

12. *Clearly state the quantitative data that concerns the beneficiaries affected by the project's accomplishments and/or the potential economic impact of the project.*

- Provided workshops for 630 childcare providers, or 250% above our original projection of 250.
- Provided workshops for 254 high school teachers, or 72% of our original projection of 350.
- The F2CC Leadership Team has engaged 15 advocates, early childhood care providers, farmers and others in planning for statewide expansion of F2CC.
- Engaged a total of 592 farmers, or almost double our original projection of 300. This includes 450 farmers reached via presentations on the producer survey and 142 farmers through our producer survey through which they were able to share their concerns and interests in institutional markets.

LESSONS LEARNED

13. *Offer insights into the lessons learned by the project staff as a result of completing this project. This section is meant to illustrate the positive and negative results and conclusions for the project.*

Participant response to Hmong Specialty Crop Curriculum: Though we chose our project focus because we knew cultural relevance was important, we could not have predicted the level of enthusiastic response we received for the Hmong-focused components of our Farm to Childcare curriculum. Particularly because of their deep agricultural roots, our partners from HAFA were able to add a rich knowledge of farming specialty crops and ties to Hmong culture. Teachers and families loved this new part of the curriculum, and were excited about the deeper potential to engage children and their communities by connecting with food and farming's cultural roots!

Small market, big vision: Through our work with the Farm to Childcare Leadership Team, we learned the importance of connecting with other groups working on related issues in order to compound the power of the work we are able to do together. Getting specialty crop farmers in the room with childcare providers and other advocates to plan how to scale up this nascent market statewide has been a huge help and reality check for both farmers and institutions. As many members have also been involved in past farm to school efforts, we are building on some hard-won knowledge about building smaller scale supply chains. This experience will help us expand the market faster than any one of us could have done on our own.

Best practices for farmer surveys: Through the development and implementation of our producer survey on farm to institution markets, we learned the importance of early and consistent collaboration with a diverse group in the development of the survey structure and process. The diversity of perspectives that were included in our efforts resulted in a robust process and product. We also learned that engaging producers in a survey process must occur in a number of different forums in order to capture a diverse range of perspectives. In this, we also learned that producers should be compensated for completing a survey, particularly one that is comprehensive enough to draw meaningful conclusions. Partners helped us with outreach by offering incentives (such as a free membership to the SFA), but attracting a larger pool of respondents would probably have been achieved only by offering some level of payment.

14. Provide unexpected outcomes or results that were an effect of implementing this project.

While we developed the curriculum to be of use to Head Start centers throughout Minnesota in the future, we are pleased to report that St. Paul Head Start has already started using a draft version of the curriculum and sourcing locally grown specialty crops from the Hmong American Farmers Association. In addition, Head Start has been receiving calls from other childcare centers asking for advice and contacts to do similar work. All things bode very well for the future impact of the curriculum in driving new business to Minnesota's specialty crop growers.

In regards to the survey development and implementation, we did not anticipate that such a large number of stakeholders would be interested in the development of the survey process and structure. From academics to producers, this group provided input beyond expectation and was committed to the success of the survey. Further, we did not expect that such a large percentage of respondents would be considering entry into or expanding their participation in farm to institution markets. A clear and overwhelming majority of farmers are orienting their work toward such markets and they expressed strong interest in collaborating with other producers and institution food service staff in meeting market demands. This is an extremely positive indication that current and future efforts to support farm to institution and grower-buyer networking are appropriate courses of action. While grower-buyer networking events are not a new idea, the issue seems to be that past efforts have not been comprehensive or consistent. Groups tend to host networking events in association with particular projects or with a focus on particular institutions, such as K-12 schools or hospitals. Despite some successes, these events have not been part of an ongoing, unified program. Because of that, they have not become a reliable tool for producers to use in accessing institutional markets as a whole. The survey findings reinforce the fact that this is not due to a lack of interest among producers, but encourages approaching these events with a more comprehensive strategy so to be the most beneficial for producers.

15. If goals or outcome measures were not achieved, identify and share the lessons learned to help others expedite problem-solving.

The only numeric and evaluation targets not achieved were for the F2S workshops. We started this project assuming that we would do a mix of in-person and web-based workshops. However, we found that childcare providers responded best to in-person workshops while high school teachers appeared to have much busier schedules. If we had started the project with this knowledge, we would not have spent time trying to arrange in-person training workshops and would have gotten the webinars for high school teachers going sooner. The Farm to School workshops did not meet their target of 80% reporting increased knowledge. As noted above, the target audience (high school teachers) started with a much higher level of experience with the subject matter. Thus, phrasing our evaluation question in terms of "increased knowledge of Farm to School" turned out to be too general to tell us anything about the perceived quality of the training or the curriculum itself. When we asked respondents if they found the workshop useful, 86% said yes, which we feel indicates that they did learn from the experience. In the future, however, we would ask more specific questions about the curriculum components to get a clearer sense of what new information was imparted and how useful that information was perceived to be by participants.

ADDITIONAL INFORMATION

16. Provide additional information available (i.e. publications, websites, photographs) that is not applicable to any of the prior sections.

This grant helped support the development of a Hmong-focused specialty crops curriculum for pre-school age children and a public report on the survey results. Hard copies of these have been mailed under separate cover.

Project 8

MN Specialty Crop Block Grant FINAL PERFORMANCE REPORT

Submitted by: Hilary Otey Wold for Minnesota Food Association

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Date: 10/15/14

PROJECT TITLE: Food Hub Strategic Development

PROJECT SUMMARY

1. Minnesota Food Association (MFA) has served as a food hub for small-scale organic vegetable farmers since the establishment of its Big River Farms training program in 2007. Big River Farms is a comprehensive, land-based incubator program that assists socially disadvantaged farmers, primarily immigrants and refugees, with starting their own certified organic vegetable farm. MFA's food hub activities were designed to address the many obstacles socially disadvantaged farmers face to efficiently and effectively market their produce.

Minnesota Food Association engaged in a strategic development process to explore the need and potential for offering expanded food hub services such as aggregation, sales and distribution to other beginning minority and immigrant farmers growing organic vegetables throughout the Twin Cities metro area.

2. The purpose of the Food Hub Strategic Development project was to find ways to increase access for small-scale organic vegetable growers to distribution systems and new markets. With many new initiatives emerging in the local food community, communication and coordination are key to effective and efficient use of resources. Careful planning and assessment prior to implementing a new practice increases the likelihood that any new services will be successful in achieving their goals and sustainable over the long term. It also ensures that efforts are not duplicated and that the core competencies of partner organization are leveraged for the most successful outcomes.

The timeline of key activities of this project is summarized below.

January-June, 2014

- Tours of other distribution facilities in the Twin Cities and discussion of potential partnership opportunities
- Interviews with key personnel at local institutions such as hospitals, workplaces and schools interested in buying local vegetables- identify barriers
- Interviews with MFA farmers and other local growers to assess interest/need in additional food hub services
- Offer two workshops on preparing for market and working with food hubs on aggregation, sales, and distribution of produce to new and immigrant farmers

June-September, 2014

- Compiled a list of services along the food chain for the Twin Cities organic vegetable industry, from grower to consumer
- Literature review and survey of national food hub models connected with beginner farmer training
- Summarize findings of market analysis and needs assessment into recommendations for MFA's role as a food hub
- Share findings, recommendations and resources list with others in the industry at conferences, workshops, meetings, etc.

3. NA

PROJECT APPROACH

4. Minnesota Food Association staff (Training Program Manager, Farm Manager, Intern, Operations Coordinator, Food Systems and Market Researcher, Interim Executive Director and Executive Director) met with and interviewed farmers, potential new buyers (especially from institutions), others who are currently developing or delivering food hub services (such as aggregation, processing, marketing, and distribution), and partner organizations that also serve socially disadvantaged farmers. The staff also toured produce distribution centers in the Twin Cities, and discussed possibilities for coordination and collaborative efforts to scale-up market options for small-scale organic vegetable growers. See **EXHIBIT A** for a complete list of contacts, potential and current partners.

A literature review of recent research about the potential impact of food hubs and a survey of similar efforts nationwide was conducted and informed the Food Systems and Market Researcher's recommendations for MFA's role in the Twin Cities' local food system. See **EXHIBIT B** for case studies of similar efforts.

Through this process, MFA has gained a comprehensive understanding of the current players in the local, organic vegetable industry from all points along the value chain as well as other potential models. This information provides the data needed for a comprehensive plan for what MFA's food hub activities will and will not include in order to remain competitive and financially sustainable while addressing the marketing needs of farmers at Big River Farms.

The major outcome of the project is the recommendation that Minnesota Food Association continue to focus on providing high quality, comprehensive, land-based farmer education programs as well as aggregation, marketing and distribution services for growers participating in the Big River Farms incubator program. Expansion of food hub services would require a level of capital and human resource investment that would unlikely provide the return necessary to justify the investment, given current market trends. This conclusion was drawn primarily from a deeper understanding of local food market trends, current food hub work in the area as well as gained knowledge of new developments of already capitalized food hub projects focused on working with the same socially disadvantaged small scale farmers (i.e. Pohlad Family Foundation Food Hub in Falcon Heights due to open in spring 2015).

Further details are outlined in the report provided by the Food Systems and Market Researcher:

A key question for MFA staff working on this project was: "Are other organizations able to do farmer training, production and support farmers in marketing, and still remain financially viable?" After a scan of dozens of incubator farms and food hubs from across the nation, a scan of trends and themes as presented in national reports and handbooks, and in-depth study and analysis of pertinent case studies, I have come to the conclusion that the answer is affirmative. Many organizations nationwide are able to do land-based farmer training and production as well as marketing support for the new farmers, and still be financially viable. Though it's a challenge for every organization, it is possible. However, no incubator program researched in this environmental scan is completely independent from grant funding (except for the sole exception of Fox Tail Farms, which is a for-profit enterprise). Farm incubation is a value-driven activity, and will not make any organization money or even pay for itself. These programs are usually highly subsidized for their participants, who are primarily socially and economically marginalized farmers who are only able to participate if the program is subsidized. In order to not be excessively grant-dependent, the large number of nascent incubator programs that have sprung up within the last ten years are discovering that they must start social enterprises (and other creative income generating activities) in order to subsidize their incubation programs.

Most organizations in this scan are able to do farmer training, while also helping incubator farmers with marketing. The organizations that are not currently helping with marketing (e.g. Groundswell) recognize that marketing for newly trained farmers is a key piece that's missing from their program. Practitioners believe it is not effective to help farmers to learn the production side of farming without fully training them on the other key aspects of being an agricultural entrepreneur—namely business and marketing skills. In fact, some of the most successful organizations have created a large market outlet for their new farmers' produce by creating food hubs/distributor enterprises which in turn also help train farmers in marketing and sales (for example, ALBA with ALBA Organics, Intervale with the Intervale Food Hub, and New Entry with the World PEAS Food Hub). Nearly all of the organizations in this collection of case studies do an aggregated CSA with the new farmers, just as MFA is doing. Another approach that some organizations have taken, or wish to take, is to put marketing into the hands of the farmers—collectively—by inviting them to form or join a producer's cooperative, a marketing cooperative, or a collective aggregated CSA (e.g. the Farley Center and Groundswell). The organizations in this scan tend to have diverse income streams, including government and foundation grants, donations, and diverse streams of earned income, which will be discussed in more detail in the following sections. Some organizations also employ cost-cutting tactics, such as engaging farmer participants in traditionally staff-run duties and requiring them to help pay for farm equipment maintenance.

MFA as a National Leader

MFA is already a leader in many aspects of its programming, and it is recognized locally and nationally for its work incubating minority, immigrant and refugee farmers. It's also recognized as a food hub. The trends that MFA is part of leading include:

- Being certified organic; not all CSAs or even incubator farms can claim organic certification and it is an enormous asset for MFA. MFA is the only organic incubator farm which focuses on working with immigrants and refugees in the Metropolitan area;
- Focusing on training socially disadvantaged farmers, in particular immigrants and refugees from diverse communities—more than half of the U.S. incubator farms serve and work with immigrants and refugees;
- Having a high quality training program, which includes marketing and a strong post-harvest handling training;
- Having an aggregated CSA for new incubator farmers to sell to; having a CSA that farmers have more and more responsibilities in as they gain experience, thus learning valuable skills for running a CSA;
- Having a strong land ethic, and commitment to being responsible stewards of the land (thus promoting farming as a way to maintain a healthy environment and help mitigate climate change);
- Giving technical assistance to other organic farms and incubator programs.

KEY FINDINGS:

Context of the Local Organic Market: In general, the Twin Cities metropolitan area is a good place to be an organic farmer, as it has a relatively strong local organic foods movement as well as a very strong consumer cooperative grocery store movement. **However, CSAs and other direct markets in the Twin Cities are becoming saturated, as they are in many places around the country. There are anecdotal reports that the CSA subscription level in the Twin Cities has plateaued and not all the CSA's are selling out, and that farmers markets are also overfull—to the point where it's becoming extremely difficult for some produce vendors to cover costs when they sell at a farmers market. In addition, the retail co-ops, who are some of the major buyers of local food (and one of the only buyer groups willing to pay a premium for local organic food), are reaching the saturation point for local organic food.**

How MFA can remain financially sustainable & effectively fulfill its mission, “to build a more sustainable food system based on social, economic and environmental justice”:

Given this challenging marketing context, it's very important MFA to think creatively about how to remain effective at executing their mission and stay sustainable financially as an organization (while also setting their trainees up for success so that they too can be financially sustainable). From this national environmental scan, I have learned that some of the most recommendable strategies that organizations like MFA can use to ensure food hub work is sustainable and effective include the following:

1. Expand into and maintain a diverse mix of markets. Most organizations do both direct and wholesale marketing.
 - a. In order to enter into markets at large institutions, many organizations find they need to invest in food processing infrastructure in order to have the necessary processing and packaging required by a large institution. Figuring out systems to ensure the required quantity and consistency is extremely important, and can be a challenge for a small diversified farm like Big River Farms (where it is not necessarily desirable to plant all of its acreage with one crop just to meet a particular institution's demand). GAP certification is often very important when entering institutional markets, and MFA may want to consider becoming GAP certified again (especially because it already has so many of the necessary food safety systems in place).
 - b. In order to enter into the largely untapped winter season market for local food, investments need to be made in infrastructure such as a root cellar, hoop houses, and potentially a commercial kitchen.
 - c. Market to public institutions that have mandates for buying locally and buying from farms run by people of color. For example, the Minneapolis Parks and Recreation Board has a racial equity mandate in its new Urban Agriculture Activity Plan which will require it to purchase a certain amount of local produce grown by producers of color.
 - d. Prioritize expansion in markets that are willing and able to pay a premium for local, organic produce cultivated by socially disadvantaged farmers, such as restaurants that highlight local foods and social responsibility to their customers, corporate campuses, and universities that may be encouraged by students to source locally, organically and fairly.
 - e. Find a distributor to refer incubator farmers to, in order to lower their marketing and distribution costs (if the distributor can offer a price that is high enough for the farmers to make a living).
 - f. Market specialty cultural foods (such as Asian, Latino and African crop specialties) specifically to ethnic grocery stores.
2. Choose and promote a signature product(s) for Big River Farms in order to stand out and attract new wholesale customers (such as the multi-grain tortillas at Finger Lakes Fresh), who will then purchase more mundane products.

3. *Create value-added products which can help secure buyers and use unsellable crop “seconds” (e.g. fruit jams, pickles, coleslaw mix, kimchi, and pesto).*
4. *Produce goods that fill niche markets- For example, organic hops for the local breweries (which are very much in demand: see the MN Hop Growers Association), cut flowers for events, or halal/kosher goat meat for local religious communities. Expand into the largely untapped winter niche market by using production techniques to extend the MN growing season (e.g. cold frames, root cellars and high tunnels).*
5. *CSA Development:*
 - a. *Invest in retention of CSA members—better communication lines, engagement and relationship building.*
 - b. *Partner with other producers in order to integrate “add-on” items (such as eggs and cheese) to the CSA shares.*
 - c. *Expand the successful and unique fruit CSA share.*
 - d. *Expand CSA drop sites: e.g., partner with large corporate campuses to serve as drop off sites for CSA shares for their employees. Partner with neighborhood organizations in up-scale neighborhoods.*
 - e. *Partner with community-based organizations in low income communities in order to explore different CSA subscription models that would increase food access to those communities. Explore potential healthy food related programming (such as a Community Cook or Community Organizer) in order to further interest in the CSA.*
 - f. *Incorporate more cultural foods into the CSA offerings (at least as add-on options).*
 - g. *Start a “Share-a-share” program so that members can help subsidize shares for low income members.*
 - h. *Provide options for low income community members to pay for their share on a weekly basis, offer them a cheaper share, and allow them to use public benefits (SNAP, WIC) to pay for it (as New Entry, Intervale and other organizations do).*
 - i. *Do a feasibility study to see if it would be possible to start a winter CSA share to attract new customers and retain current customers.*
 - j. *Invest in better visibility. Be sure to be listed on on-line social networks and directories. (E.g. the author could not find MFA in the Land Stewardship Project’s “2014 MN and WI CSA” directory.)*
Invest in a staff position (or two) to give MFA the capacity to do the networking, logistics, and relationship- building that’s necessary to find, grow and maintain buyers and accounts

Food Hub: expansion or retention of the current scale?

Another major question related to this research project was whether or not it would make good financial sense for MFA to expand its food hub operations, or to maintain its current scale. It is true that some of the most successful and long-standing incubator programs also have large food hubs, which serve as a major marketing outlet for the trainee farmers. Some examples include ALBA (the most successful of the case studies), Intervale and New Entry. Finger Lakes Fresh is an example of a social enterprise created to help subsidize the value-driven programs of its parent non-profit, Challenge Workforce Solutions. ALBA Organics, for example, makes significant income for ALBA's other programs. However, the success of a food hub as an income-generating enterprise depends largely on the local market and the presence of competing enterprises.

The Twin Cities is already home to a very large and successful organic produce distributor, Co-op Partners Warehouse, which also focuses on supporting local farmers and giving them technical assistance—serving a role very similar to that of a food hub. It's important to note that the term "Food Hub" describes a set of socially responsible business practices. Though the definition of a food hub is constantly evolving, the National Good Food Network defines a food hub as "a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand."ⁱ Many distributors also have these practices and therefore can be considered food hubs, even if they do not identify as such.

There are also other food hubs and distributors in the Twin Cities that focus on local food, such as BIX Produce, and many more that specialize in distributing organic food. These well-established distributors anecdotally appear to be already doing a good job of aggregating and distributing produce for small, medium and large scale farms in the Metropolitan area. In addition, many of the retail co-ops buy directly from small producers (60% of local food for retail co-ops is bought directly), removing the need for a food hub/distributor and creating more profit for farmers. **Based on this context, there does not appear to be a need for—or space for—MFA to become a large food hub.**

Food Hubs often take many years before they turn a profit, and take a large investment of up-front capital (especially if food processing equipment is purchased). They also need subsidies if they wish to do anything beyond their core business. "While many food hubs are well positioned to be economically viable businesses that can carry out the core aggregation and distribution functions without external subsidies, they recognize that they need further support/partnerships if they are to offer a variety of complementary producer and community services."ⁱⁱ Studies show that non-profit food hubs tend to be less successful financially than other organizational structures. According to the National Food Hub Survey of 2013, "Financially, the most successful food hubs tend... to be **for-profit** and **cooperative** in structure, in **operation for more than 10 years** and working with a **relatively large number of producers**."ⁱⁱⁱ Therefore, to make a profit as a food hub, an organization must have a long term plan, expect to not see a profit for up to ten years, and be able to commit significant resources to the project.

Though a large food hub is an option for MFA to make a small profit to help subsidize its incubator program, and it will likely not turn a profit for a significant amount of time. It will also require a lot of staff time and energy—especially to find large amounts of new markets for an expanded amount of produce—which might take away from MFA's cornerstone farmer training program. Therefore it most likely will not be the most effective profit-generating social enterprise. It is recommended that—at least for the time being—instead of heavily investing in expanding to be a large food hub (which would include farmers beyond the current incubator farmers and graduates), that MFA instead maintain its current food hub operations. These operations include aggregating, marketing and distributing trainee farmers' produce through the Big Rivers Farm aggregated CSA and wholesale accounts, while also offering training and technical assistance to those farmers, and making an effort to expand their market reach into underserved areas where there is lack of healthy, fresh food. Because MFA already provides food hub services, it can continue to receive grant money for these activities. The one expansion that MFA might consider would be to work more with graduate farmers to aggregate enough quantity of certain kinds of produce in order to meet the demand of a large-scale buyer such as a hospital, school or food distributor like Co-op Partners Warehouse. For more information on Food Hubs please see the [Regional Food Hub Resource Guide](#) (2012), the [2013 National Food Hub Survey](#), and [The Equitable Food Hub Toolkit \(2014\)](#), which are vital resources for anyone operating a food hub.

5. Many partners were involved in this project. Feedback and collaboration was provided by representatives from nonprofit organizations, businesses and agencies including: Co-Op Partners Warehouse, Monpaj's Garden, Pohland Family Foundation, Urban Oasis, Farmers Legal Action Group, Minnesota Department of Agriculture, Immigrant Farming Partners Collaborative, University of Minnesota and many more. See **EXHIBIT A** for a complete list.

Additionally, many publications and resources were reviewed. See **EXHIBIT C** for details.

100% of the crops involved in Big River Farms production are specialty crops. BRF farmers have diversified vegetable production (50+ vegetable varieties) that includes only qualified specialty crops.

Findings and resources have been shared at MFA farmer trainings and workshops through the fall/winter in addition to the recent 10th annual Immigrant and Minority Farmers Conference (2/7 and 2/8/15), of which MFA is the fiscal agent. Findings and recommendations have been shared with community partners in numerous collaboration planning meetings with partners including but not limited to: Farmers Legal Action Group (FLAG), Good Acre Food Hub (still in development), Hmong American Partnership (HAP), National Incubator Farming Initiative members, Minnesota Immigrant Farming Partners Breakfast Group, Land Stewardship Project, Coop Partners, etc.

Over 40 specialty crop farmers will be directly impacted and receive benefit from this project in the 12 month-period. We aim to have about 15 individual farms involved (10 currently in our program and 5 graduate farms) which totals over 40 farmers. This project will also reach another 170 farmers through a presentation session at the 9th Annual Immigrant and Minority Farmers Conference in February 2014.

15 farm businesses were involved, though the proportion was different than anticipated. 13 farms were in the program in 2014 and we engaged with at least two graduate farms (Sebra Farm and Encore Farm) along with many other farmers in the region. Over 40 diversified vegetable growers were directly impacted from this project and over 200 immigrant and minority farmers (mostly vegetable growers) attended the 9th annual Immigrant and Minority Farmers Conference.

GOALS AND OUTCOMES ACHIEVED

6. Please see summarized list of key activities in #2 above.
7. Outcomes were accomplished during project timeline.
While many organizations or partners provided some of feedback, at least 22 of the partners listed in Exhibit A and throughout the report provided significant information that was used in the plan development.
8. Below is a comparison of actual accomplishments with the goals established for the project:

<u>Outcome 1</u>	
Goal: To conduct an inclusive planning process for a new food hub which will leverage resources and increase impact through cooperation among multiple players	Comprehensive and inclusive research was conducted to determine most viable options for food hub planning for MFA. While food hub expansion will not be pursued, relationships developed through the course of the research will enhance partnerships, collaboration, and marketing efforts for produce from Big River Farms growers.

Performance Measure: Increased cooperation and coordination between existing food hubs, growers, buyers and nonprofits supporting local vegetable industry.	Through the opening of dialog among MFA and partners involved, increased cooperation and coordination have occurred. For example, Co-op Partners has offered to provide MFA on cross-docking services and MFA has offered to provide post-harvest handling training for some of the other small scale farmers selling to Co-op Partners. Additionally, MFA and Pohland Foundation have begun discussions on mutually beneficial activities in preparation for their \$5M food hub launch in spring 2015. Additionally, MFA began partnering with Stone's Throw Ag Coop to pilot shared delivery services.
Benchmarks: # of current partners/buyers working with MFA on food distribution.	Please see EXHIBIT A for list of some of the partners and buyers working with MFA on distribution.
Target: 15 organizations/businesses provide input into the plan for a new food hub.	Many more than 15 organizations, businesses, foundations, agencies and food system professionals contributed to the planning efforts.
Outcome 2	
Goal: To increase market access for socially disadvantaged vegetable farms by providing multiple services at one location (MFA as a food hub)	Market access for socially disadvantaged vegetable growers was established and increased through strengthening MFA's market reach for current program participants.
Performance Measures: More demand/ new markets for local, organic vegetables.	New markets were accessed for program participants including a major account at Lakewinds Coop, Farmers Markets, and various restaurants.
Benchmarks: # of socially disadvantaged vegetable farms currently selling through MFA as a food hub.	MFA currently aggregates from over 10 certified organic farms owned by socially disadvantaged farms. Next year, this number may be higher, depending on
	number of participants in the program.
Targets: 30 farms can make a sustainable living and their businesses are viable as a result of new market opportunities.	With an average of 3 farmers working on each of the 10 farms in the program, each year approximately 30 farmers will benefit financially from participating in Big River Farms food hub.

9. Data contained in various parts of this report clearly demonstrate achievement of project outcomes.

BENEFICIARIES

10. The group that primarily benefitted from this project is small-scale, socially disadvantaged organic vegetable farmers. Additionally, multiple partners, buyers and other affiliated groups benefited from the collaboration and knowledge sharing. Finally, Minnesota Food Association and Big River Farms and those who farm there, will benefit from a well-researched plan for food hub activities that will help to ensure current and future capacity to provide high quality programming coupled with produce aggregation and distribution services. Each farm business in our program represents 2-4 farmers. With more than 40 benefitting directly from Minnesota Food Association and Big River Farms work and over 200 in attendance and gaining benefit from opportunities there, an estimated 240+ specialty crop producers benefited from the work of this project.

11. Please see outlined goals and accomplishments in #8.

LESSONS LEARNED

12. Lessons learned from this project include:

- a. Some recent research of the Twin Cities local food system indicates the potential that certain markets are saturated for local food.

- b. Food Hub development and activity has grown both locally and nationally in the last 5 years. There is still debate about if profitability is possible and how best to ensure food hub sustainability.
- c. There is a distinction between certified organic producers and those who may be farming using sustainable methods but are not certified. Ensuring organic certification for all involved in aggregation activities is a huge challenge and often a barrier to expansion given that many growers choose not to become certified.
- d. Dynamics of the food system can change drastically and rapidly. With increased funding and attention on food hubs, much of this work has been launched in the last few years in the Twin Cities. The landscape is changing monthly and will be very different in just 1 year from now. It will be interesting to see how new food hubs will change the local food system considering they are competing with established distributors as well as each other.
- e. Scaling up aggregation, marketing and distribution services does not guarantee a proportional increase in profitability. For example, Alba Organics (in California) operates an incubator farm and food hub model similar to that of MFA. While they make \$5M in annual revenue, they do not consider themselves profitable due to narrow sales margins, high operating costs and infrastructure investments needed. The same challenges persist at all sizes.
- f. There is still a strong need for MFA to continue aggregating, marketing and distributing produce for certified organic, socially disadvantaged farmers who grow at Big River Farms.

13. An unexpected outcome of the project was the final recommendation that Minnesota Food Association maintain current food hub activities. While MFA intends to continue to work on expanding current market outlets for Big River Farms produce, the costs and logistical challenges of finding and working with other certified organic, socially disadvantaged vegetable farmers are prohibitive.

14. All goals and outcomes of the project were achieved.

ADDITIONAL INFORMATION

15. Please see exhibits below.

Thank you for your partnership!

EXHIBIT A

Below is a list of services along the food chain for the Twin Cities organic vegetable industry, from grower to consumer, focused on entities that are small to medium scale, organic and connected to immigrant farmers. This list includes potential partners, aggregated producers, distributors, immigrant-focused organizations, buyers, directories and more.

PRODUCERS & PRODUCER RELATED ORGANIZATIONS:

Key partners (current or potential) for MFA in Local Food scene:

These are primarily groups that work with, or are comprised of, immigrant/indigenous/people of color/women producers:

- Central Minnesota Sustainability Project (CMSP) - "Holding the vision that one day, every Central Minnesota household will utilize sustainably grown or ethically produced foods and services, CMSP has a focused mission to facilitate local, sustainable food productions and markets through education and community building for a diverse and inclusive Central Minnesota. Just as the Earth thrives on biodiversity, we believe that communities also thrive when fully embracing the diversity of all individuals and families." CMSP has found that its work fills the community need in particular of African immigrant women and children. Their Market Garden Program is has many similarities to MFA's program, and, uniquely, it has multi-racial leadership. It might be productive to meet with CMSP leadership to talk about potential collaboration and/or to share ideas.
- Farmers' Legal Action Group (FLAG)- is a nonprofit law center dedicated to providing legal services and support to family farmers and their communities in order to help keep family farmers on the land. MFA has a current partnership with FLAG, and FLAG writes in funding for technical assistance from MFA into its grants.
- Latino Economic Development Center (LEDC)- LEDC's vision is "a thriving multicultural community, enriched with Latino leadership, culture, and economic influence" and their mission is "To transform our community by creating economic opportunity for Latinos." They do special projects, one of which includes "Agricultural Cooperative Development". They helped to form the "Stone's Throw Agricultural Cooperative" with Stone's Throw Urban Farm and three rural Latino-run farms-including Cala Farms (the farm of a MFA graduate).
- Hmong American Farmers Association (HAFA)- The mission is to advance the economic, social and cultural prosperity of Hmong American farmers in Minnesota through economic development, capacity building, advocacy and research. HAFA has recently obtained land and started an incubator farm for experienced farmers. HAFA is interested in working with MFA regarding organic farming training in the future.
- Frogtown Farm- Frogtown Farm is the vision of longtime Frogtown residents. For the past several years, Frogtown Farm has worked in concert with members of the community, The Trust for Public Land, the City of St. Paul and the Wilder Foundation to acquire a 12.7-acre parcel of land for a public park and farm, of which 5.5 acres will be developed as an urban farm. The vision is that it will be a hub for a healthy food system that fills gaps in food production, storage, manufacturing, and distribution. Frogtown Farm will be recognized as a destination for those seeking learning, innovation, reflection, celebration, and authentic community. Rooted in values of social equity, justice, and inter-connectedness, this urban farm on the hill will serve as a model for multi-cultural community and a catalyst for economic development, wealth creation, community pride, and sustainability. Frogtown Farm has been in conversation with MFA about future collaboration once Frogtown Farm is up and running, and Frogtown Farm promotes MFA as an inspirational example.
- Hmong American Partnership (HAP)- HAP provides Hmong and other refugee communities with services and support to help them adjust to life in America and maximize available opportunities. They have an agricultural and youth related project called Project Grow, which is a program for high school juniors/seniors and college freshmen, with the purpose of introducing them to the importance of conserving and protecting the environment and its natural resources. Youth participants are engaged in career exploration, service learning, and leadership development.
- Urban Roots-, formerly Community Design Center of Minnesota, is a Saint Paul-based organization whose mission is to build vibrant and healthy communities through food, conservation and youth development.
- Youth Farm- is a youth development program focused on agriculture whose goals are to; Build young leaders; Promote healthy bodies and minds; Contribute to the positive identity of children and youth; Create neighborhood connections and community opportunities for contribution; and to Develop and nurture healthy relationships.
- African Development Center (ADC)- is dedicated to the economic empowerment and success of African

immigrants. Minnesota is home to over one-hundred thousand African immigrants, many of whom face language, cultural, and religious barriers. ADC actively works to reduce these barriers and create a path for African immigrants to achieve financial success. ADC is a leader in micro-lending to small businesses, outperforming even the largest banking institutions in the state of Minnesota. ADC currently works with small urban business entrepreneurs, but not farmers.

- African Economic Development Solutions- (AEDS) works with African immigrants in building wealth within its communities through its economic development activities and links to resources by working with partner neighborhood organizations. AEDS established an economic development model that fits the need and helps building wealth within African immigrant communities. Staff have shown interest in immigrant farming enterprises. Contact: Gene Gelgelu at ggelgelu@aeds-mn.org
- Neighborhood Development Center- NDC believes that residents, small businesses and neighborhood groups in *all* communities have the talent, energy and ability to engage and revitalize their own communities Since May of 1993—in eight ethnic communities and 25 low-income neighborhoods in Minnesota—NDC has helped build community support around the idea of creating, financing, and supporting resident-owned small businesses as a means of revitalizing inner city neighborhoods. There are more than 450 NDC-assisted businesses currently in operation. These businesses are building neighborhood economies—from within. Contact is Teshite Wako, Chief Financial Officer.
- Asian Economic Development Association-The Asian Economic Development Association (AEDA) was formed in 2006 to increase economic opportunities for low income Asian Americans in the Twin Cities by supporting small business and entrepreneur development. AEDA goals are developing, retaining, and growing Asian-owned small businesses and micro-entrepreneurs in low income neighborhoods of Saint Paul, North Minneapolis, and the Northwest suburbs where large Asian populations are found. The contact interested in agricultural enterprises is: Tinh Le (Business Counselor)
- African Immigrant Services- Empowering African immigrants and refugees through civic engagement and creative access to resources.
- Afro Eco- The mission of Afro Eco is to connect Pan African people to the land, to sustainable food production practices, to healthy living, to cultural knowledge and processes that improve our capacity to practice effective social, economic, cultural and ecologically sound cooperation with each other and others. There is no Afro Eco web- site or contact information available, but members listed include Sam Grant.
- Community Table- seeks to address nutritional, economic, environmental, and social community needs by building a local and sustainable food system that connects the chain between growers and consumers. Created to address the food production, processing, transportation, and distribution needs of the Twin Cities communities, we are an integrated network of community members and cooperative businesses owned and operated by community members and their supporting partners. Operating under basic co-op principles of equity, transparency, and trust, our goal is to grow food, nurture community, and make it economically vital.
- Main Street Project- Main Street Project's mission is to increase access to resources, share knowledge and build power in order to create a socially, economically and ecologically resilient food system. We envision a food system that revitalizes our communities – revitalizes Main Street – now and in the future, by: 1) Creating economic opportunities for low-income immigrants and rural communities – not just agribusiness. 2) Producing safe, affordable, and naturally nutritious foods, free from antibiotics and chemicals. 3) Using energy and natural resources more efficiently to lower production costs, reduce environmental impacts and adapt to climate change realities.
- MN Food Project- champions the sustainable production and equitable distribution of energy and food in communities across Minnesota.
- Tamales y Bicicletas- believes that the Madre Tierra does not pertain to us but we pertain to the Madre Tierra as a healthy community civically engaged and empowered. Developing healthy Latino and immigrant communities through bikes, cultural empowerment, and environmental justice. They work with youth, and run several food justice projects.
- Women's Environmental Institute- at Amador Hill, a 501(c)(3) non-profit organization, is an environmental research, renewal and retreat center designed to create and share knowledge about environmental issues and policies relevant to women, children and identified communities especially affected by environmental injustices; to promote agricultural justice, organic and sustainable agriculture and ecological awareness; and to support activism that influences public policy and promotes social change.
- Dream of Wild Health- The mission of Dream of Wild Health is to restore health and well-being in the Native

community by recovering knowledge of and access to healthy Indigenous foods, medicines and lifeways. It is centered at a 10-acre organic farm in Hugo, Minnesota. The farm is a place to gather and work as a resource for the Native Community. It is a place of learning, a place of celebration, a place of being, becoming and belonging. The farm is a model put into practice. It is a place of safety for kids. It is a place to regenerate and re-propagate the seed. It is a place to keep alive the vision of our values.

- White Earth Land Recovery Project/Native Harvest- The mission of the White Earth Land Recovery Project is to facilitate recovery of the original land base of the White Earth Indian Reservation, while preserving and restoring traditional practices of sound land stewardship, language fluency, community development, and strengthening our spiritual and cultural heritage.
- Minnesota Land Trust- Since 1991, the Minnesota Land Trust has been working hand-in-hand with landowners and local communities to protect Minnesota's increasingly threatened lands and waters.
- Eco Education- "Our innovative, culturally relevant programs and holistic approach to environmental education inspires young people to take action to enhance their social systems and the natural world." This could be a potential partner with regards to increasing the number of schools and after-school programs that visit and learn from MFA.
- Appetite for Change- uses food as a tool to build health, wealth and social change in North Minneapolis. Appetite for Change is organizing a group of growers on the Northside of Minneapolis.
- Twin Cities Agricultural Land Trust- We want permanent access to quality land for food producers in the Twin Cities Metro. We advocate for a region that has permanent and sufficient land – with a diverse array of land tenure options – for people who seek to grow food and meet the food needs of local communities by using agricultural practices that restore landscapes. Agriculture and food production will be recognized as a valuable land use and economic engine in our metropolitan region. MFA staff are currently in communication with this group.
- Project Sweetie Pie- Project Sweetie Pie will be revitalizing North Minneapolis using scattered gardens to seed community agricultural businesses and ultimately a Food Corridor with 500+ liveable wage jobs within walking distance from home. Join us as we work together to bring healthy food, vigorous exercise, intergenerational learning and new community engagement.
- Urban Organics- A sustainable farm on a mission to inspire a better food system for the people, by the people. Urban Organics is working to fix a broken food system one delicious meal at a time. The concept is simple. Local equals fresh. Fresh equals nutritious. Nutritious equals healthy, for people and community. The process is equally simple. Urban Organics farms with aquaponics, where fish and plants help each other grow. Our farm is located on the east side of Saint Paul, Minnesota. We've taken the long vacant and derelict Hamm's Brewery facility and turned into a fully sustainable, year-round farm growing USDA certified, 100% organic produce.
- Our Community Food Projects- Working with community partners, Our Community Food Projects (OCFP) establishes and implements new ideas to increase access to healthy food and address issues of food equity, social justice and economic disparities. MFA is a fiscal sponsor and close partner of OCFP.
- The Intertribal Agricultural Council- was founded in 1987 to pursue and promote the conservation, development and use of our agricultural resources for the betterment of our people.

Producer Co-ops, Marketing co-ops and collaboratives, Food Hubs and Aggregated CSA's:

- Stone's Throw Agricultural Cooperative- We are a producers cooperative which is run and owned by three rural farms and one urban farm in the Twin Cities region. We are a diverse group of farmers committed to working together to make farming and local food consumption more accessible to people of all backgrounds. Our CSA has many options for fresh summer and hearty winter vegetables, pastured meat, raw honey, and local mushrooms. By working together we believe we can support the growth of a stronger and more resilient regional food system. This Cooperative includes Cala Farm, which is run by a graduate of MFA. The cooperative provides markets to a variety of farmers from different backgrounds and CSA members participate in an organization that is directed by farmer- owners.
- SPROUT MN, LLC- is a Central Minnesota-based food hub located in Brainerd, Minnesota. It actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand. SPROUT MN also works directly with local producers and buyers by providing technical assistance on Good Agricultural Practices, food safety, licensing, and post-harvest handling. Building on 9 years of work on viable community based food systems,

SPROUT MN coordinates Farm to School for six Central MN districts and provides premiere and resort restaurants with quality local foods from over 40 local producers. SPROUT MN will be the backbone of a regional sustainable food system by expanding market opportunities for producers in Central Minnesota; and helping the community live happier and healthier lives through providing wholesale buyers and Community Supported Agriculture (CSA) customers with the freshest, tastiest, and most nutritious local products.

- Heartland Food Network- “strives to promote the increased consumption of local foods in Minnesota every year. We believe that everybody deserves fresh, locally grown food, and we work to increase access to this food for all Minnesotans. We support local farmers by increasing the demand for fresh, local products in establishments across the state.”
- Pride of the Prairie- In 2007, Pride of the Prairie launched the Buy Fresh Buy Local consumer education campaign as a marketing strategy to increase access to sustainable locally produced foods in Southwest and West Central Minnesota. The campaign represents: A BRAND that identifies our prairie region and its abundant supply of local, sustainable, healthy foods. A CAMPAIGN that helps people understand food systems and to make ethical and sustainable choices. A CHAPTER with partners representing the various sectors of a local food system, working together to promote healthful, sustainable and ethical food choices.
- PrairieFare- is a small group of western MN farmers who collaborate to market their products.
- Superior Grown- is a trademarked name, logo and directory used to create a unique identity for regional farmers and for business that support local agriculture. The project was initiated in 2003 with a unique partnership between the Northeast MN Sustainable Development Partnership (NMSDP), the Lake Superior Sustainable Farming Association (SFA), the Institute for a Sustainable Future, Lake Superior Slow Food Convivium, and a variety of regional businesses, farmers and citizens.
- Twin Cities Local Food- was created to make locally grown food more accessible to residents of the Twin Cities and help foster stronger connections between people and the food they consume. We are committed to promoting food produced with sustainable practices and informing consumers of the value in it. We believe that knowing the source of good food is one part of building a healthier community. It is essentially an on-line food hub for the Twin Cities.
- Browse & Grass Farmer Association- Browse and Grass Farmer Association consists of independent sheep and goat producers whose animals are raised naturally on pastures, meadows and woodlots. Their vision is to “Implement and maintain the use of sustainable, ethical and holistic practices to provide food choices that meet our consumers’ values, religious criteria and will also provide a living wage for our producer members; Provide food-related information, education and technical support for producers and the broader community; Collaborate with researchers, educators and diverse community members to increase understanding of food values, traditions and religious requirements pertaining to food.”

Potential Partners for an Urban Satellite Location:

- Hope Community- Hope works with community residents to reclaim one of the most diverse neighborhoods in the Twin Cities (Philips community). Their Health & Strong Community program has a focus on food justice. Hope is constructing a 4th affordable housing rental building soon, and this development will feature a large urban garden. Hope, along with the Land Stewardship Project who is partnering with them on the project, are trying to figure out what they will do with this space. One idea is to begin a local CSA, which could partner with a rural farm for products that are harder to grow in the city. This could be a great opportunity for MFA to partner with a Minneapolis-based organization. Contacts are Betsy Sohn (Hope) and Dylan Kesti (Land Stewardship Project).
- The Land Stewardship Project fosters an ethic of stewardship for farmland, promotes sustainable agriculture and develops sustainable communities.
- Frogtown Farm- See first page of this list for a further description.
- Neighborhood Organizations/District Councils: Neighborhood organizations at times work on food projects, and could be potential key urban partners for MFA. Find Minneapolis Neighborhood Associations here. Find a list of St. Paul District Councils here.
- Gardening Matters- Gardening Matters grows the success and sustainability of community gardens by supporting the gardeners that make them happen. We connect gardeners with resources, training, and networking opportunities, provide public education, advocate for supportive community garden policies, and build community and regional collaboration for the Good Food movement, embracing home gardening and community gardening as a vital part of a diverse, community-based food system.

- Waite House- Phillips Community Healthy Living Initiative- is a multi-sector collaboration of organizations committed to improving health and wellness for all members of the Phillips Community. We are working together to infuse Phillips with new options for healthy food and physical activity while empowering residents to make their health a priority. Contact: Jilian Clearman

Financers of Producers:

- Minnesota Department of Agriculture- Our mission is to enhance Minnesotans' quality of life by ensuring the integrity of our food supply, the health of our environment, and the strength of our agricultural economy.
- Agstar Financial Services- Is a financial cooperative, owned by our clients, who are also our stockholders. We provide a broad range of financial services and business tools for agricultural and rural clients in Minnesota and northwest Wisconsin.
- USDA Farm Service Agency-The Minnesota Farm Service Agency's mission is to support this key industry in our state through the efficient and effective delivery of agricultural programs for all farmers, ranchers and agricultural partners.
- USDA Natural Resource Conservation Science- NRCS's natural resources conservation programs help people reduce soil erosion, enhance water supplies, improve water quality, increase wildlife habitat, and reduce damages caused by floods and other natural disasters. Public benefits include enhanced natural resources that help sustain agricultural productivity and environmental quality while supporting continued economic development, recreation, and scenic beauty.
- USDA Risk Management Agency- Serving America's agricultural producers through effective, market-based risk management tools and solutions to strengthen the economic stability of agricultural producers and rural communities.

ORGANIC FOOD DISTRIBUTORS:

- Co-op Partners Warehouse- "Co-op Partners is committed to fostering sustainable farming practices and organic agriculture by supporting local producers, small farmers, and family farms." CPW is in a unique situation because it is cooperatively owned by the same members who own The Wedge Co-op (a retail store) and Gardens of Eden (a farm). Therefore, it is a model of a cooperatively-owned supply chain: including a farm, a wholesaler and a retail store. CPW sells to many accounts, but most of its sales are to retail co-ops. By comparison with CPW, its local competitors in distributing organic are likely to be larger in volume but sell less local product. Over the course of the year, primarily during the local growing season, CPW buys from around 80 local producers, with a few large ones dominating, and nearly 100 long-distance producers, mostly on the West Coast. Co-op Partners Warehouse is unique because of its Drop-shipment (cross-docking) which is a key service that provides logistical support for small producers and for larger producers to reach smaller or more distant customers. This service enables a small producer to make one stop that will get the producer's product to any CPW customer for only a small per pallet charge, usually \$25-30. Unlike conventional distribution where the distributor buys the product and adds an operating margin, with cross-docking the producer retains ownership of the product until it arrives at the customer. This service is significant in the local system and is growing in volume; in 2013 nearly 50 producers used CPW cross-dock services, usually on a regular basis. The average local producer that sells to CPW is earning approximately \$45,000 in revenue annually through selling to CPW. CPW does a total of about four million in sales of local product, with between 80 local suppliers/producers—and it does another approximately 2 million in sales through cross-docking, increasing the amount of revenue producers receive through using CPW's services. CPW is a significant player in the local foods system- it delivers around 20 percent of local product in the food co-op system through conventional distribution and a significant part of the direct delivery total through its cross-dock service for producers. MFA might consider either selling to CPW, or encouraging MFA farmers use its services (such as cross-docking).
- BIX Produce- Bix Produce secures product commitments each year from local growers and supports our customers' ever growing desire for locally grown products. We have the ability to supply various fruits, vegetables, and herbs that support local agriculture in the communities where we live and work.
- H. Brooks & Co.- Our mission is simple. We find and deliver the best produce possible. Period.
- J&J Distributing- In 1978, James and Deborah Hannigan launched J & J with 300 square feet and 4

employees- with a passion for quality fruits and vegetables that we've never forgotten. Today, with an innovative 100,000 square-foot warehouse in the heart of the beautiful city of Saint Paul, Minnesota, we're manned by 200 experienced and dedicated people ready to serve you. We have a full range of conventional, organic, and value-added fresh and dried products to take care of your every need.

- Albert's Organics Founded in 1982, Albert's Organics is the nation's leading distributor of quality organically grown fresh produce and perishable items, including meat, dairy, soy products, juices/beverages, and much more. Albert's Organics is now part of United Natural Foods, Inc. (UNFI), a national distributor of organics— other local food distributors bought up by UNFI include: Blooming Prairie and Roots 'N Fruits Cooperative.

MINNESOTA AGRITOURISM

- Green Routes- produces glove box maps and online web pages list regional small businesses that are rooted in their communities: farms, restaurants serving local food, artisans, and regional sites of interest.
- University of Minnesota Tourism Center- The Tourism Center website contains Minnesota visitor profiles, information about the spring sustainable tourism conference, and contact information for Extension educators working on tourism in your region.
- Explore Minnesota Tourism- Explore Minnesota Tourism has staff in St. Paul, Mankato, Duluth, Brainerd, and Thief River Falls who work closely with communities and businesses interested in tourism development.

BUYERS:

Potential Institutional wholesale buyers:

As direct markets (Farmers markets, CSAs, farm stands) become saturated in the Twin Cities Metro, more producers are looking into wholesale markets. At the same time, more large institutions are recognizing the value of sourcing local, organic foods. There still remain many challenges for producers to enter these markets. However, with skill, knowledge, communication and persistence, it is possible to sell directly to institutions. Kinds of institutions include: schools, universities, child care facilities, hospitals, extended care facilities, state institutional facilities (i.e. corrections facilities), food service management companies (often a way to "get in" to a large institution) and corporate campuses.

Resources

- The Washington State Department of Agriculture has an excellent Small Farm & Direct Marketing Handbook with a section on Selling Directly to Institutions.
- Marketing Local Food is an indispensable publication of Minnesota Institute for Sustainable Agriculture (2007); this report covers multiple aspects of marketing local food in MN, including direct marketing (which includes agritourism, p. 33) and intermediate marketing (institutions, distributors). This can be a very valuable resource for MFA's next marketing staff to explore.

Food Service Management Companies:

- Bon Appétit "We are an on-site restaurant company offering full food-service management to corporations, universities, museums, and specialty venues. We require our chefs to purchase at least 20 percent of their ingredients from small (under \$5 million in sales), owner-operated farms and ranches located within 150 miles of their kitchens." They service local institutions including Macalester College.
- This list of food service management companies that can service schools from the MN Department of Education is a helpful tool.
- A'viands Food & Service management is an employee-owned Minneapolis-based Food Service Management Company, which could be a potential customer. They service health care, corrections, higher education, school nutrition, and businesses and corporations.

Health Care:

- Healthy Food in Health Care- (HFHC) is a national initiative of Health Care Without Harm (HCWH), developed in conjunction with its member organizations. We work with hospitals across the country to help improve the sustainability of their food services. Founded in 2005, the program provides education, tools, resources, and support to health care facilities, making the connection between the health of patients, staff and community and the food they serve.
- Institute for Agriculture and Trade Policy did an analysis on MN hospitals buying local produce- The

conclusion was that Hospitals are willing to look at buying local produce, but generally want to do so through their current distributors. Lakeview Hospital- in Stillwater- some staff at this hospital have expressed interest in MFA's CSA (being a drop-off location) and if the right staff relationships are built perhaps they would be open to purchasing wholesale from MFA.

Schools:

- Minneapolis Farm to School Program- contact is Andrea Northup at: 612-668-2854 or andrea.northup@mpls.k12.mn.us. "If it grows in our region and it's in season, you can bet the produce on our menu is from within 200 miles of Minneapolis! We call these "*Local*" produce items. Additionally, many fruits and vegetables are sourced from small, minority-owned, family or beginning farms. We call these "*Farm to School*" items." The district aims to buy 10 percent of its produce from local producers in 2014- focusing on root vegetables such as potatoes, beets and carrots, and other items that keep well like squash. It will buy on contract from eight growers in the next school year, and make spot purchases from another eight, most within 75 miles of the district. MFA is getting certified by them this summer and will start selling to them this growing season.
- Saint Paul Public Schools Farm to School program- "The Farm to School program promotes healthy eating habits, supports neighboring small and mid-sized farmers, and builds the local economy. Plus, it offers important learning opportunities for students in the cafeteria, in the classroom, and in the community." MFA has sold small amounts to this program in the past, and it may be worth rekindling this relationship.

Park and Recreation Boards:

- Minneapolis Parks and Recreation Board- In particular, the new Urban Agriculture Activity Plan adopted in 2014 provides a mandate for MPRB to increase the amount of local foods it purchases for its events and activities (see pages 8 and 9 of the plan). Since the plan also has a racial equity assessment, sourcing from non-white farmers will be a priority for MPRB under this plan, making it a good target market for MFA graduates.
- Saint Paul Parks and Recreation- An award-winning, nationally accredited organization, Saint Paul Parks and Recreation provides an abundance of facilities, amenities, and activities for participants of all ages and abilities.

Cities:

- Saint Paul's Local Foods web-site
- Homegrown Minneapolis is an initiative to develop recommendations for the City of Minneapolis to improve sales, distribution and consumption of fresh, locally grown foods to positively impact the health, food security, economy and environment of our City and the surrounding region.

RESOURCES, FOOD-SHELVES, and OTHER:

- The Washington State Department of Agriculture created the Small Farm & Direct Marketing Handbook with a section on Selling Directly to Restaurants and Grocery Stores.
- 2009 Minnesota Directory of Organic Buyers- This Directory lists approximately 100 Minnesota-based retailers, wholesalers, manufacturers, and other buyers of organic commodities and food products.
- Slow Foods MN has a list of businesses that follow the Slow Food principles of "Good, clean and fair." These restaurants, farms, artisans and retailers consistently produce or use food that is flavorful and healthful, and grown in a way that protects the environment and respects workers. These restaurants and grocery stores could be potential markets for MFA.
- Heavy Table's Atlas of Ethical Eating In 2009 Heavy Table did a questionnaire for Twin Cities' restaurants regarding ethical practices, including whether or not they source locally. These restaurants could be potential markets for MFA.
- Sabathani Food Shelf provides one of the largest food shelves in the area. 25,000 people a year gain food security and self-sufficiency. Contact (who is dedicated to food justice): Sandra Rischardson
- Emergency Food Shelf is a full service food bank, providing quality, nutritious food and support services to over 200 hunger relief partners, including food shelves, on-site meal programs, and Fare For All sites, throughout the state. Specifically relevant is their "Culturally Specific Initiatives" through which EFS partners

with agency partners to distribute culturally appropriate food to West African, East African, Southeast Asian, and Latino communities. Culturally Specific Initiatives programming provides foods that are not only nutritious, but also familiar and enjoyed by the families receiving them.

- Edible Twin Cities- The goal of our publications and web site is to be a resource that makes eating, growing, and enjoying our local abundance an everyday pleasure. Edible Twin Cities serves the greater Twin Cities metropolitan area and western Wisconsin.

RESTAURANTS THAT FOCUS ON LOCAL PRODUCE/FOOD:

Minneapolis:

- Alma Restaurant <http://www.restaurantalma.com/> 528 University Avenue Southeast, Minneapolis, MN 55414, (612) 379-4909 Fresh, seasonal, organic, and local fine dining; vegetarian and non-vegetarian tasting menus; dinner only.
- Birchwood Café <http://www.birchwoodcafe.com/> 3311 East 25th Street, Minneapolis MN 55406, (612) 722-4474 Café in Seward Neighborhood emphasizes “good real food” and their own fair trade coffee blend; includes vegetarian, vegan, and local fare.
- Brasa Rotisserie <http://www.brasa.us/> 600 E Hennepin Ave, Minneapolis, MN 55414, (612) 379-3030 Rotisserie restaurant featuring chicken, pork, and beef from Minnesota farms; creole/southern-style side dishes, guacamole and the yams with andouille sausage are recommended.
- Common Roots Café <http://www.commonrootscafe.com/> 2558 Lyndale Ave. S, Minneapolis, MN 55405, (612) 871-2360 In Uptown; emphasizes homemade food with local and organic ingredients.
- Craftsman Restaurant <http://www.craftsmanrestaurant.com/> 4300 Lake Street, Minneapolis, Minnesota 55406, (612) 722-0175 Regional New American cuisine. Fine dining in Longfellow neighborhood; locally sourced ingredients; meat and fish dishes.
- 112 Eatery <http://www.112eatery.com/> 112 N 3rd St, Minneapolis, MN 55401, (612) 343-7696 Find dining featuring local ingredients.
- French Meadow Bakery <http://www.frenchmeadowcafe.com> 2610 Lyndale Ave S, Minneapolis, MN 55408, (612) 870-7855 Features organic baked goods with a selection of vegan products.
- Hell’s Kitchen <http://www.hellskitcheninc.com/> 80 S 9th St, Minneapolis, MN 55402, (612) 332-4700
- Lucia’s <http://www.lucias.com/> 1432 W 31ST St, Minneapolis, MN 55408, (612) 825-1572 Features locally produced ingredients.
- Namaste Café <http://www.namastechai.com/> 2512 Hennepin Ave S, Minneapolis, MN 55405, (612) 827-2496 Indian restaurant in historic duplex in Uptown neighborhood; uses local ingredients and free range meats.
- Red Stag <http://www.redstagsupperclub.com/> 509 1st Ave NE, Minneapolis, MN 55413, (612) 767-7766 LEED certified restaurant serving local ingredients.
- Sen Yai Sen Lek <http://www.senyai-senlek.com/> 2422 Central Avenue NE, Northeast Minneapolis, MN 55418, (612) 781-3046 Thai restaurant located in NE Minneapolis; incorporates local ingredients.
- Spoonriver <http://www.spoonriverrestaurant.com/> 750 S. 2nd St (@ Chicago Ave S), Minneapolis, MN 55401, (612) 436-2236 Located in the historic Mill District next to the Guthrie Theater; serves gourmet organic and vegetarian food.

Saint Paul:

- Heartland Restaurant <http://www.heartlandrestaurant.com/> 1806 St. Claire Ave, Saint Paul, MN, (651) 699-3536 Features North American Midwest regional cuisine, indigenous and cultivated ingredients, and organically grown and sustainably raised local ingredients from small family farmers and artisanal producers.
- Izzy’s Ice Cream <http://www.izzysicecream.com/> 2034 Marshall Ave, Saint Paul, MN 55104, (651) 603-1458 Neighborhood ice cream shop featuring local ingredients and sustainable practices; the shop generates its electricity from 200 rooftop solar panels.
- Legacy Chocolates <http://www.legacychocolates.com/> 2042 Marshall Ave, Saint Paul, MN 55104, (651) 646-0644 Features preservative free, high quality chocolate products made from Criollo cacao (an heirloom variety of the cocoa bean sourced from small-scale, sustainable farmers in Latin America) and fresh cream and butter from independent local creameries in Minnesota; also sells fresh roasted coffee beans and teas.
- Trotters Café and Bakery <http://www.trotterscafe.com/> 232 Cleveland Ave N, Saint Paul, MN 55104, (651) 645- 8950 Quaint, neighborhood café featuring local and organic ingredients and whole grain baked goods.
- WA Frost & Company <http://www.wafrost.com/> 374 Selby Ave, Saint Paul, MN 55102, (651) 224-5715

Features New American cuisine, with an emphasis on sustainable local ingredients.

Grocery Stores:

- Though existing food co-ops have their demand for local food completely met by current producers, new Co-ops can sometimes offer a new market for farmers. MFA has already started to source to the new Lakewinds Co-op. Another new Co-op, located in South Minneapolis, is the Friendship site of Seward Co-op. There could be a potential for this particular store to be open to prioritizing purchasing products from immigrant/refugee and people of color farmers, since there is a Community Benefits Agreement being developed that may include purchasing quotas from producers of color. There is another co-op being developed in North Minneapolis, The Wirth Co-op, which might also be open to prioritizing products from producers of color/immigrants/refugees.
- Twin Cities Co-ops- The Twin Cities area food co-ops are 12 community and member-owned grocery stores dedicated to connecting neighborhood residents with the small, local producers, who stock their shelves and cases with the freshest produce, dairy and meat products available.
- Local D'Lish Almost every product in the store is grown or made right here in Minnesota and the larger Midwest region. We work with over 200 local and organic farmers and food artisans. Every purchase from Local D'Lish is helping to support our own local farmers and small businesses.
- Lunds and Byerly's: A family-run enterprise with deep roots in the Twin Cities, Lunds and Byerly's are leaders in local food sourcing among commercial supermarkets, and appear to be national leaders as well. This is a tribute to both the fact they are an independent, relatively small company, and also that they have long known local growers by shopping at the Minneapolis farmers market. MFA used to source to Lunds.

OTHER HELPFUL RESOURCES:

- Minnesota Food Charter- will identify what is needed to ensure healthy, affordable, and safe food for all Minnesotans. This charter will inform decision making across the state, promote stronger networks and increased collaboration, and involve the community in its creation. Initial Findings for the Minnesota Food Charter can be found [here](#).
- Institute for Agriculture and Trade Policy- IATP works locally and globally at the intersection of policy and practice to ensure fair and sustainable food, farm and trade systems.
- The Sustainable Farming Association of Minnesota supports the development and enhancement of sustainable farming systems through farmer-to-farmer networking, innovation, demonstration, and education.
- University of Minnesota Extension- Extension education and research improves economic, social and environmental conditions in Minnesota and the world by engaging Minnesotans to make better decisions, take positive action and create significant outcomes in their lives and communities. Much of Extension's research, outreach, and activities focus on agriculture, health, sustainability, and rural economics. Extension has programs focused on Small Farms, Livestock, and Commercial Fruits and Veggies.
- Minnesota Institute for Sustainable Agriculture — University of Minnesota- MISA is a resource for small and sustainable farmers in Minnesota and beyond The purpose of The Minnesota Institute for Sustainable Agriculture (MISA) is to bring together the diverse interests of the agricultural community with interests from across the University community in a cooperative effort to develop and promote sustainable agriculture in Minnesota and beyond. MFA was a co-founder of MISA.
- Renewing the Countryside- Renewing the Countryside promotes sustainability-based rural enterprises, communities, farmers, artists, and others whose work supports rural renewal. RTC connects farmers and food buyers, catalyzes food systems development, conducts food systems research, provides training and networking opportunities for new farmers, assists older farmers with transitions plans, and conducts public education on food systems.
- Midwest Organic and Sustainable Education Service- MOSES educates, inspires, and empowers farmers to thrive in a sustainable, organic system of agriculture.
- National Sustainable Agriculture Information Service- ATTRA is a program developed and managed by the National Center for Appropriate Technology (NCAT). The majority of funding for ATTRA is through a cooperative agreement with the United States Department of Agriculture's Rural Business-Cooperative Service. ATTRA services are available to farmers, ranchers, market gardeners, Extension agents, researchers, educators, farm organizations, and others involved in agriculture, especially those who are economically disadvantaged or belong to traditionally underserved communities.

MINNESOTA-BASED LOCAL FOOD DIRECTORIES

- Community Supported Agriculture (CSA) Directory- Call the Land Stewardship Project at 651-653-0618 or e-mail: lsjpwbl@landstewardshipproject.org to request a print copy.
- Food Alliance Midwest Certified Farmers-The Food Alliance certifies farms as following sustainable practices. It also has a list of cooperating retail grocery stores, food services, and distributors that carry products from certified farmers.
- Minnesota Grown- The directory covers all regions of Minnesota: northwest, northeast, southwest, southeast, and Twin Cities metro area.
- Stewardship Farm Directory-The Directory is a list of Land Stewardship Project members who sell food and other farm products directly to consumers or through local retailers. Call the Land Stewardship Project at 612-722-6377 to request a print copy.
- Superior Grown- Directory covers the Lake Superior basin area of northeast Minnesota and northwest Wisconsin.
- Localfood.umn.edu- This website serves as a hub of information on local foods in Minnesota. It includes an interactive map allowing users to see the location of a range of local food entities (i.e., coops, CSAs, farmers markets, processors, etc.).

EXHIBIT B**CLASSIFICATION OF CASE STUDIES:**

	<i>Organizational structure</i>			
		Non profit	Hybrid co-op/non-profit	For Profit
<i>Organization's Primary Activity</i>	Incubator only	1. Nuestras Raices 2. Groundswell 3. New Lands Refugee Farmer Collective		1. Foxtail Farm
	Incubator-hub hybrids	1. ALBA 2. Intervale 3. New Entry	1. Farley Center 2. Our Harvest Cooperative (union cooperative)	
	Hub only	1. Finger Lakes Fresh Food Hub 2. Corbin Hill		

QUICK FACTS

- ❖ Category: non-profit incubator, and recently piloted a food hub.
- ❖ Date founded: Nuestras Raíces-1992; Beginning Farmers program-2005.
- ❖ Size of farm land/location: 10 community gardens; 30 acre urban farm where 1/8 to 1 acre plots are rented to incubator farms.
- ❖ Number of staff: 13 total, one for the incubator project.
- ❖ Annual Budget: 2013 total revenue: \$745,100 (and total expense: \$771,371).
- ❖ Revenue Sources: Contributions and grants (federal, city and foundations): \$686,292; Program service revenue: \$40,618 (or 5.4%); other revenue: \$18,190.
- ❖ Number of farmers/participants: 20 farmers from 2013 season (includes farmers who attended winter trainings and who are experienced farmers renting land from NR) Most are low income Latino males, and 40% self-identify as being disabled.
- ❖ Key partners they work with: For the beginning farmers program: Lutheran Social Services, CISA UMASS Extension, Land for Good, Perennial Solutions, and Pantoja's Tax Service.
- ❖ Organization's website: www.nuestras-raices.org

NUESTRAS RAÍCES

Holyoke, MA

Mission: "Our mission is to create healthy environments, celebrate *agri-culture*, harness our collective energy, and advance our vision of a just and sustainable future."

Nuestras Raíces (NR) is a food justice project in Holyoke, MA that focuses its work on community gardens and an incubator farm. The major yield for Nuestras Raíces in general is growing sustainable green enterprises, supporting community organizing focused on environmental justice, and celebrating *agri-culture*, a term which expresses the focus of emphasizing the cultural aspects to agriculture. In particular, Nuestras Raíces celebrates the Puerto Rican culture of the majority of its participants. They host many cultural events at their farm. The major yield for the incubator project in specific is supporting minority farmers in developing their own agribusinesses. *Earned income strategies for the organization include:* fee-for-service, lease income, and renting event space. Earned income for the incubator farmers includes sales at farmers markets and to Nuestras Raíces for wholesale orders.

Marketing to Low Income Communities: NR offers payment plans for their CSA, and a work share option (where a CSA member can partially pay their balance by working up to 4 hours on the farm- getting \$32 off the final price). They also have a donor-supported CSA (where some members donate for low income people to receive reduced price CSAs), and their community gardens are mostly used by primarily Latinos who otherwise would not have land access to grow food. They also ran a pilot project in 2013 to sell aggregated products from the farmers in a Mobil Market at housing complexes located in food deserts, such as a senior center.

Next steps: In 2013 Nuestras Raíces piloted a food hub system to aggregate wholesale food purchase from the farmers (paid for with cash) to resell retail in the farmers market, a Mobile Market, in the CSA, at the farm Store and for wholesale orders.

Key lessons for MFA: Nuestras Raíces is a small organization, and yet takes on a lot of projects. Its budget is under 3/4 million but it's doing at least 6 programs. No wonder that it is funded by many government grants and Foundations. They do not seem to have a strong earned income strategy. However, they do charge money for farm tours. They also piloted a winter CSA program in 2012. NR provides a service for coupon incentives—which means they gather the non-cash benefits that their farmers get at markets, and pay them cash within a week (this allows the farmers to receive their money 3 weeks faster than the usual 4-week waiting period). NR is unique in that it focuses on celebrating the food culture of its primary group of participants, which is the urban Puerto Rican community.

Sources: Nuestras Raíces website; [2013 Nuestras Raíces Annual Report](#)

QUICK FACTS

- ❖ **Category:** Non-profit; Hybrid Incubator and Food Hub
- ❖ **Date founded:** ALBA was formed in 2001. However the root organization of ALBA started back in the 1970's. ALBA Organics (their food hub) started in 2002.
- ❖ **Size of farm land/location:** 110-acre organic farm (at the Rural Development Center) and another 60 acres that can be cultivated at The Farm Training and Research Center.
- ❖ **Number of staff:** Eight total.
- ❖ **Annual Budget:** In 2009-10: ALBA's Programs: Grant Revenue- \$2,000,000+. ALBA Organics: Combined Sales Revenue - more than \$3,000,000 (\$4.5 million in 2012). ALBA-supported Farmers: Gross Income, more than \$3,000,000.
- ❖ **Revenue Sources:** ALBA has been successful in obtaining funding from many private foundations, federal governmental agencies, and state and local agencies. In 2010, it received \$980,000 in grants from more than 12 private foundations and 5 federal agencies, and its non-profit operating budget continues to grow. ALBA also has sponsors and receives in-kind donations.
- ❖ **Number of farmers/participants:** 50 total, 16 new farmers on the incubator farm (2012 information). More farmers are involved in their "Farmer Education Program" each year.
- ❖ **Key partners they work with:** ALBA has dozens of sponsors and hundreds of partners, which is a major strength of the organization. ALBA serves many partner organizations and fresh produce customers, including schools and colleges, public health agencies, farm education programs, small business development centers, policy coalitions, and other non-profit organizations.
- ❖ **Organization's website:**
www.albafarmers.org

THE AGRICULTURE AND LAND-BASED TRAINING ASSOCIATION (ALBA)

Salinas, CA

Mission: "To advance economic viability, social equity and ecological land management among limited-resource and aspiring farmers. We work to create opportunities for family farms while providing education and demonstration on conservation, habitat restoration, marketing and whole farm planning."

The Agriculture and Land-Based Training Association (ALBA) provides educational and business opportunities for farm workers and aspiring farmers. The objective is to get more farmland into the hands of Latino Organic farmers, while promoting land conservation and stewardship and promoting rural economic development. They are having success. "The number of Latino farmers in Monterey County increased 70% from 1997 to 2002" according to the United States Department of Agriculture's Census of Agriculture. Besides a large food hub (that distributes nationally) and an incubator program, they also have other programs including an environmental science program for elementary school students called "Food, Land and Water: Connecting Families with Conservation" and a Wetland Restoration project.

"While the number of Hispanic farmers grew by 14 percent over the past five years, according to the 2007 Census of Agriculture, significantly outpacing the increase in U.S. farm operators overall, Hispanic farmers comprise only 2.5 percent of all farm operators."

[\[Fox News AP article\]](#)

Earned income strategies: ALBA created ALBA Organics to be an earned-income social venture that provides marketing education while supporting beginning farmers' sales development. ALBA Organics is a licensed produce distributor, selling to clients such as Stanford University, Google, and Trader Joe's. ALBA Organics products are sold to more than 80 customers, including wholesale distributors, corporate food services, restaurants, hospitals, universities, and retail stores in the San Francisco Bay Area and Monterey Bay Area. In fiscal year 2012, ALBA Organics brought in sales of \$4.5 million. ALBA Organics is an integrated part of ALBA's programs, it is critical to its new farmer's success and it is also more and more a critical source of earned income for ALBA as an organization. This pool of unrestricted funds is an important complement to more traditional funding sources for ALBA such as federal and foundation grants, and it is helping ALBA reach its goal of being financially sustainable.

Marketing to Low Income Communities: ALBA has various strategies for increasing access to healthy local produce for low income communities.

"In the last two years (2009-10), ALBA's efforts and program have contributed close to \$8,000,000 to the local economy."

[\[2009-10 ALBA Biennial Report\]](#)

The majority of ALBA farmers are low-income Latinos, and they bring their own organic food to their families and communities—therefore, more people in the Latino community are eating organic food thanks to ALBA. Since 2010, ALBA has organized Market Match which is a market incentive program for families relying on SNAP benefits. When these families choose to spend \$10 at select farmers markets they receive a \$5 bonus to spend on local produce. Finally, ALBA started a Fruit and Veggie Prescription program in partnership with the Health Clinic of the Salinas Valley, where residents can receive prescriptions from doctors along with vouchers to purchase fruits and vegetables from ALBA Organics. ALBA is also working with a company that owns 50 WIC-only stores to test out the possibilities of increasing fresh local produce in those stores.¹

ALBA has a large economic ripple effect; in fact, during the years 2009-10, ALBA's programming resulted in "a total of 40 farmers (who) created 36 new jobs and sustained more than 67 for a total of 103 jobs and at least \$1.2 million in income." [2009-10 ALBA Biennial Report]

Next steps: ALBA aims to leverage its significant assets and build on its long history to continue to deliver quality programs and to become self-sustaining, in order to continue their legacy of positive rural development.

Key lessons for MFA: ALBA is a very successful hybrid incubator and food hub organization. ALBA Organics is incredibly successful and moves very large volumes of produce. It even distributes nationally—the author purchased some of their organic strawberries in Minneapolis. ALBA Organics was started to be both a marketing outlet for the new farmers coming through ALBA's training programs, and to help train the farmers on marketing and other skills, so as to help them to become successful entrepreneurs. ALBA Organics provides farmer-vendors with technical assistance on crop planning, field production, post-harvest handling/packing, as well as the marketing for distribution to a variety of customers.

Apart from the size and success of its food hub, something else that makes ALBA so unique and successful is the fact that it focuses on training farm workers to become farm owners. ALBA has very compelling stories—including about marginalized Latino farmworkers taking their power into their own hands and getting the education/training/resources they need to start their own organic farming businesses (improving their standard of living in their own generation, not just for their kids), and about people achieving their dreams of being their own boss and not an underpaid farmworker working for someone else. In this agricultural-rich region of the nation (CA), ALBA is promoting the health of farmworkers/farmers by training people, in particular Latinos, in organic farming. Therefore ALBA is directly addressing the negative health issues implicit in conventional farm work. ALBA has gotten a lot of Californian and national media coverage (e.g. NPR, Fox News) in part, at least, because of these compelling stories.

In addition to the incubator program and the food hub, ALBA does environmental education through partnerships with schools to teach elementary school students. ALBA also creates multiple options for people to get involved in their training. The Farm Education Program (PEPA in Spanish) serves as the entry point into ALBA's incubator program—only successful graduates chosen from the PEPA program may enter into a First-Year Farmer Apprenticeship, which then leads to enrollment in the Farm Business Incubator. This multi-step process ensures that those who enter the incubator already have some knowledge, know what they are getting into, are hard-working and committed. Acceptance into the Farm Education Program is competitive, meaning it's even more competitive to get a spot on the incubator farm. Finally, academic credit for their Farm Education Program is available through Hartnell Community College, increasing the benefit of participation for many trainees. ALBA also engages the limited resource farmers it works with in civic engagement and political education, by including them in broader networking and providing spaces for them to give testimony to elected officials. ALBA considers political education very important, so that new farmers can learn about the relevance of public policy to their businesses and families.

ALBA has been very innovative, and has many firsts: "1. [It's] the first farm-worker-based strawberry production cooperative as an economic development vehicle, 2. The first to involve commercial banks to finance emerging family farmers in Salinas, 3. The first rural development and training center with land and facilities used as a start-up incubator for immigrant farmer development, 4. The first organic produce distributor serving as a social enterprise business model to support start-up organic farmers with sales and marketing services, 5. The first to combine environmental land management practices with its business incubator-based community development strategy."²

ALBA is a very large, long-running and successful incubator, food hub and educational organization. It demonstrates that it is possible to run an organization that trains beginning farmers and helps them bring their products to market, while remaining financially sustainable as an organization. With the tremendous success of ALBA Organics, it may even prove to be financially self-sufficient (without the need for outside resources such as grants) in the near future. However, ALBA's geographic location certainly contributes to its success and not all food hubs can count on the same financial success.

Sources: ALBA Website, [Fox News AP article](#), [2009-10 ALBA Biennial Report](#), [Food Hub Resource Guide](#)

¹ Barham, James, Debra Tropp, Kathleen Enterline, Jeff Farbman, John Fisk, and Stacia Kiraly. Regional Food Hub Resource Guide. U.S. Dept. of Agriculture, Agricultural Marketing Service. Washington, DC. April 2012. <http://dx.doi.org/10.9752/MS046.04-2012>.

² ALBA Biennial Report (2009-2010). www.albafarmers.org/2011-06/alba-Biennial-Report-2009-2010.pdf

QUICK FACTS

- ❖ **Category:** Non-profit; Incubator.
- ❖ **Date founded:** Groundswell in 2008 & the Incubator program in 2013.
- ❖ **Size of farm land/location:** 10 acres total (not all of it is ready to farm) There is about one acre now in production. Farm is on bus route.
- ❖ **Number of staff:** Two part time staff (they are significantly understaffed currently). Mentors for the incubator farmers are all working farmers that Groundswell contracts with.
- ❖ **Annual Budget:** All of Groundswell-\$160,000. Incubator program alone: approximately \$60,000.
- ❖ **Revenue Sources:** 80% from grants-USDA's Beginning Farmer and Rancher Program; Park Foundation, Appalachian Regional Commission, etc. 10% of income from donations from members, and 10% is earned income (from workshops, etc.).
- ❖ **Number of farmers/participants:** Three farmers on the land currently.
- ❖ **Key partners they work with:** Cornell Cooperative Extension, Alternatives Federal Credit Union (for the business side of things), many individual farmers (as mentors to new farmers), Corbin Hill, and Finger Lakes Fresh Food Hub.
- ❖ **Organization's website:** www.groundswellcenter.org

GROUNDSWELL CENTER FOR LOCAL FOOD & FARMING

Ithaca, NY

Mission: "Groundswell's mission is to engage diverse learners and empower them with skills, knowledge and access to resources so they can build sustainable land-based livelihoods and equitable local food systems. We provide practical and applicable experience-based education and business incubation through a network of successful local farms and partner organizations. The result we seek is successful entry into and growth of our local food and farming systems."

Groundswell is a training and education focused non-profit in Ithaca, NY, which works to train farmers and educate food citizens. Its Incubator program is focused on training and preparing new farmers so that they are ready to farm independently on their own land. Their target audience for this program is socially disadvantaged communities—people of color, refugees, and veterans—anyone who has been excluded. Groundswell staff want to look into how gender plays into this target audience, in particular by having more mentors who are women to serve as role models.

Earned income strategies: The organization is largely grant dependent, and does not foresee that changing any time soon. Some income is generated from class fees and donations from members. Groundswell is a very new incubator, and at this early stage they are being careful to not promise marketing assistance to the incubator farmers. However, it's become very clear to Executive Director Joanna Green that this assistance is vital for the program to function well. They have written grants with the hopes of providing more marketing and on-site support for the farmers, as well as funding development for the organization. Groundswell staff wish for this person to find new wholesale markets for the incubator farmers, since direct markets (CSAs, farm stands and farmers markets) are almost saturated in the Ithaca area. They wish to connect the incubator farmers to the Finger Lakes Food Hub as well as to Corbin Hill (see case studies for these organizations in this report), helping to connect low income farmers of color to low income communities of color in New York City. Joanna does not envision trying to earn income for the organization from what is produced at the farm, and want to instead focus on increasing their funding development work through more grant writing and individual donations. Groundswell staff try to be realistic with farmers about how difficult it is to farm and generate enough income to live off of. Instead, they explain that farming can provide supplemental income. If the potential participant has extremely limited employment opportunities due to language or other barriers, the small amount earned from farming can mean a lot. The other people that fit well with the program are people who have a deep passion from farming and will do it regardless of the small profit margins—those people are the ones who most likely have the grit needed for farming.

Marketing to Low Income Communities: Groundswell does not market any produce itself; the participating farms do their own marketing. However, connecting farmers with low income communities is a goal. Groundswell is working with Corbin Hill to get produce to low income

communities in New York City. In Groundswell's county (Tompkins County), most low-income people live in rural areas. Cornell Cooperative Extension operates several youth-run farmers markets in rural communities, which might be one avenue to get produce to low income communities. They have also considered trying to sell to the Food Bank of the Southern Tier. Another idea is to try to develop a mobile market in or near a low-income housing project. Cooperative Extension is trying to get local produce into low income communities but with limited success. It may be totally different if a grower of the same culture as the people who have limited food access (i.e. from the African American or Burmese cultures) does the outreach. For example, one of the current incubator farmers has connections with communities of color in downtown Ithaca—and if he markets his own produce in those communities, it may be received more enthusiastically.

Next steps: Groundswell would like to have another 100 acres in the program within the next three years (though not necessarily all in production). The pieces of land may or may not be clustered. They then need to put in infrastructure such as hoop houses and irrigation. With more acreage, they could support more advanced beginning farmers, including “graduates” of the original incubator site. For example, qualified farmers could take a five or 10 acre plot for a longer term lease, and so it could become not just an incubator farm but a business cluster. They, like MFA, are also exploring the idea of helping to form a cooperative of farmers so that the farmers who leave their incubator can more easily access wholesale markets working together (rather than competing). They also want to get GAP certified to help ensure access to wholesale markets. Groundswell wants to start community gardens in order to get refugee families involved, and continue to recruit participants at local ESL classes and Catholic Charities, an organization which has services for refugees in Ithaca.

Key lessons for MFA: Groundswell is a very new program—however there is still much that MFA can learn from Groundswell's experience. For example, they want to focus their program on benefiting new Americans. They spent over a year on a New Americans pilot program, doing outreach to immigrants and refugee communities. They learned that what their program was offering was often too unclear and risky for refugee communities (in terms of finances and time), and that as it currently functioned it was not a good fit for many refugees in Tompkins County (who are mostly Burmese). They recognize that it's a stretch to ask refugees/immigrants to jump into the business of farming (giving up other jobs they may have access to) when it's such a difficult and low-margin business.

The new way they are thinking about engaging new Americans is by providing them opportunities to grow their own food in community gardens. These could be large, family-oriented community gardens that function with a collective effort. For example, many female refugees in Tompkins county are unemployed (their husbands often are the ones working a job) and Groundswell could provide them an opportunity to come with their kids and grow food for their family in a community of other gardeners/farmers. Eventually, over time, the gardeners could decide to take the leap to starting an agricultural business—but it may take some time as they learn English, etc. Also these community gardens will help families supplement their income by replacing food they would need to buy. There will be land, tools and irrigation available to the gardeners, and possibly child care. It will be a much more fluid and flexible program that Groundswell staff believe will be a better fit for many immigrants and refugees in the area. The idea of an “intermediate stage” for MFA is interesting, in particular because MFA has had some challenges in recruiting farmers willing to make the monetary and time commitment to farming a 1/4 acre far away from the Twin Cities. MFA could possibly start a satellite urban community garden with an urban partner located in St. Paul and/or Minneapolis, which would serve as an intermediate stage for immigrants/refugee communities unable or unwilling to make the commitment to the training program at Big River Farms. From that garden, MFA could recruit for the more time-consuming/advanced program at Big River Farms.

Groundswell is also learning early on in their program that direct markets are nearly saturated, so they want to lead their program design with markets. The idea is to first open up wholesale markets (i.e. Finger Lakes Fresh and Corbin Hill) and then find the farmers who want to learn to grow for those markets, and those would be the farmers who enter their incubator program. The idea is to lead strategic planning with the available markets. It's a very different mind-set then the typical: “grow produce first-and find a market which will take the produce later.” This market-based approach may take more time, but it's focused on ensuring that farmers leaving the program will be in a position to generate income from their agricultural enterprise.

In addition, Groundswell believes it's important to offer refugee farmers and gardeners transportation, translation and childcare. A former Groundswell intern, Susannah, helped Groundswell staff think in new ways about the “practical pathways that refugees can take to overcome barriers and grow into farming. Rather than trying to assimilate their own farming traditions with the commercial farm business model prevalent in the United States, Susannah advocated a collective model in which multiple families work together on a small plot, sharing labor and risks, and learning together as they gradually develop their markets. This is the pathway that has worked well at other incubator programs for refugee farmers.”³

Sources: This case study relies primarily on information gathered in an interview with Groundswell Director Joanna Green (conducted by Claire Stoscheck) on June 23, 2014 as well as information from the [Groundswell website](#) and the [Groundswell blog](#).

QUICK FACTS

- ❖ **Category:** Union Cooperative; Food Hub & Incubator hybrid.
- ❖ **Date founded:** created by the Cincinnati Union Coop Initiative, which emerged in 2009.
- ❖ **Size of farm land/location:** approximately 130 acres; including a 30 acre urban farm on bus routes and farms spread out in and out of the city. They emphasize the importance of having a farm be on a bus route.
- ❖ **Number of staff:** 10 staff total, eight farm staff (includes farmers) and two for the food hub.
- ❖ **Annual Budget:** Unknown. It's a cooperative enterprise so there is no annual report.
- ❖ **Revenue Sources:** Sales & unknown.
- ❖ **Number of farmers and participants:** Two incubator farmers, with one mentor. They did not accept any new farmers in the 2014 season.
- ❖ **Key partners they work with:** Cincinnati Union Coop Initiative, United Food and Commercial Workers Union, United Steelworkers, Ohio Cooperative Development Center, WeThrive!, Cincinnati State and Mondragon USA.
- ❖ **Organization's website:** www.ourharvest.coop
- ❖ **Organizational contact:** kristin@ourharvest.coop

OUR HARVEST COOPERATIVE

Cincinnati, OH

Mission: "Jobs-Food-Farmers: We believe growing quality jobs, the best food, and skilled farmers helps strengthen the work force, supports healthy living and gives families & communities the best opportunity to flourish."

Our Harvest Cooperative is a very new cooperative in Cincinnati, OH that focuses on creating family-sustaining jobs, producing sustainably-grown produce, and building a food hub to strengthen the local food system and increase access to healthy food. Their plan to sustain these efforts is by training new farmers in an incubator program. Our Harvest Cooperative is the only incubator food hub hybrid that is also a Cooperative in this survey—not only that but they are a Union Cooperative, making them even more unique. In fact, this enterprise is in part testing the Union Worker-Owner Cooperative model from Mondragon (from Spain) in the US. Our Harvest Cooperative is just one of many co-ops created by Cincinnati Union Coop Initiative (CUCI), which was created in 2009. CUCI emerged in the wake of a historic 2009 agreement between Mondragon and the United Steelworkers, North America's largest industrial union, to launch union-cooperatives modeled off of Mondragon in the United States. Mondragon is a very successful cooperative enterprise based in Basque, Spain, which employs 83,000 workers in 256 companies—the majority of which are cooperatives. They aim to spread the co-op model into the USA and therefore are collaborating with United Steelworkers (USW) to start spreading their model to workers in the US. Our Harvest Cooperative is the first of these enterprises in the US to be modeled off of the Mondragon cooperatives.

Earned income strategies: Our Harvest has a CSA, and also sells to restaurants. Their goal is to sell to big institutions. They've partnered with Cincinnati State (a university) to have a CSA drop off point on campus and to supply produce to their campus restaurants. In addition the university's students will come and train on the farm and help to produce the food that's served on their campus.

Marketing to low income communities: This does not appear to be an active intentional focus for them, though they do state that they want to improve the region's access to local food, and address food security issues.

Next steps: With Ohio State University College of Food, Agriculture and Environmental Sciences, they are doing a project to determine the feasibility of scaling Our Harvest up to operate 1000 acres of production, so that they can reach the scale needed to source to large institutional buyers. They wish to have an expanded apprenticeship program at a local community college, and Mondragon is working closely with CUCI to firm up Our Harvest's structures and locate additional financing.

Key lessons for MFA: Our Harvest Cooperative is worker-owned, and focused on providing living wage jobs. It collaborates with many universities as well as the Cincinnati Union Coop Initiative and Mondragon USA. They have put the incubator program on hold (and aren't accepting new farmers in 2014)—likely for growth sustainability reasons. They are a very new enterprise but very unique, and it would be very interesting to watch them and learn from them along the way.

Sources: [YES Magazine](#); Our Harvest Website; [Ohio State University South Centers Website](#)

QUICK FACTS

- ❖ **Category:** Food Hub; a social enterprise of the non-profit Challenge.
- ❖ **Date founded:** Food Hub- 2014. Parent organization, Challenge, in 1968.
- ❖ **Size of farm land/location:** They designed and built an 18,000 square foot State-of-the-Art facility.
- ❖ **Number of staff:** 20 FTE jobs distributed among 25 staff. The goal is to have 51% of employees be people with barriers to employment & have an integrated workforce. They have exceeded this goal.
- ❖ **Annual Budget:** Unknown (just started 14 weeks prior to interview).
- ❖ **Revenue Sources:** Total Net Assets for Challenge--\$2,899,164. They receive money through social enterprises, donations, grants etc. Challenge is making approximately 25+% of its income from its Social Enterprises (they have many Social Enterprises, including: Industrial Cleaning, Imaging, Staffing services, etc.)
- ❖ **Number of farmers/participants:** Currently they source from 20 farmers (medium to large farms) and by the end of 2014 the goal is to have 50.
- ❖ **Key partners they work with:** Distributors (very key), farmers, and they'd like to work with Groundswell.

FINGER LAKES FRESH FOOD HUB

Groton, NY

Mission of parent organization Challenge Workforce Solutions (the Food Hub doesn't have its own mission statement yet): Challenge is a non-profit, vocational organization supporting people with disabilities and employment barriers in developing their skills and interests to meet the ever-changing needs of today's workplace and be productive and contributing members of their community."

The Finger Lakes Food Hub is a processing center where local food is aggregated, value is added to it (through washing, chopping, pureeing, packaging, etc.) and it's distributed to stores, restaurants, schools and Food Banks through their large existing network of distributors. Before opening up the Food Hub in the spring of 2014, Finger Lakes Fresh had been in the agricultural business for several years with a hydroponic greenhouse operation. The Food Hub is a social enterprise of the non-profit Challenge Workforce Solutions. Challenge is committed to working with individuals with barriers to employment, to start businesses in order to not rely on government funding and to be more economically self-sufficient, and to create jobs for people with barriers to employment. They are also committed to strengthening the local agriculture base.

Earned income strategies: During the past several years, Challenge has been developing business enterprises as a way of supporting their mission to provide employment opportunities for people with physical and mental disabilities and other barriers to employment (e.g. refugees with limited English and people who have been incarcerated). This is particularly important because the traditional funding sources for Challenge (and similar non-profits) is getting smaller every year, and so they had two choices: shut down their services, or generate their own income through Social Enterprises. Challenge now operates five integrated businesses – including Finger Lakes Fresh – employing workers with and without barriers to employment. All of these businesses generate income to support Challenge's programs and services. The work they are doing now has a double bottom line – social and financial – and it is their goal to excel in both areas. Finger Lakes Fresh includes the Food Hub enterprise, as well as a hydroponic lettuce greenhouse (which started four years before the food hub). The hydroponic lettuce greenhouse is at capacity—it sells all over the northeast and everything that it produces it can sell. The goal for the Food Hub is that in 2016 (after just two years of operations) it will begin to generate profit. Of course initially that profit will be used to pay back some of the initial investment in the food hub and/or reinvest in the Food Hub

business, but eventually it will make a small profit that will help subsidize Challenge's other programs. In the meantime it is providing jobs to people with barriers to employment, helping to fulfill Challenge's mission. As for how the Food Hub plans to make (and is already making) revenue, they are focusing on value added products. They have invested a lot into creating a State-of-the-Art food processing facility so that they can add value to all the produce they source from local farmers. They sell tortillas, coleslaw mix, chopped apples, dehydrated apples and more to a Whole Foods store, Wegmans, Regional Access (a distributor) and other wholesale buyers. Steve Holzbaur, the General Manager of Finger Lakes Fresh, emphasized that it's vital to have products with "sex appeal"—something that will draw customers your way. For them, selling hydroponic lettuce and local multi-grain tortillas brings in customers who might later end up buying more mundane items too like zucchinis. Having a flagship product (or products) is very important for brand identity and attracting customers.

GAP Certification: One limiting factor determining which farmers Finger Lakes Fresh can source from is GAP certification. GAP certification is more and more important for wholesale buyers. However, it's not feasible for many small farmers to get GAP certified and so the general manager (Steve) finds that he mostly has to work with medium to large farms (25 acres to thousands of acres) and can't work as much with small farms (though he works with a garlic producer who has four acres). Finger Lakes Fresh is the only GAP certified producer in Tompkins County—so they are only one that can sell to big buyers that require GAP certification such as Wegmans and Walmart. Steve's interpretation is that the requirement for GAP certification is only going to get stricter with large buyers. Finger Lakes Fresh would like to work with Groundswell—so that Groundswell can help farmers become GAP Certified and help train farmers to grow specialty crops such as herbs which Finger Lakes Fresh would then buy.

Marketing to low income communities: Finger Lakes Fresh would love to distribute to low-income communities and has plans to do so. They are in discussion with two regional Food Banks to provide the service of re-packing produce in order to make it more practical for the Food Bank to distribute. For example, the Food Bank gets bins of zucchini and the Food Hub could wash, cut and re-package them. Finger Lakes Fresh operates in Groton, NY which is considered a rural food desert and their goal is to sell directly to people in Groton first, see how it goes, and continue from there.

Next steps: The biggest market potential in Tompkins County are the Universities. The county's population is around 100,000 people and the University makes up about half of that population. Not only that, but they are a captive audience. So like any economic activity in Tompkins County, Finger Lakes Food Hub's marketing strategy essentially needs to revolve around the Universities. The Major Universities in the area are open to sourcing from Finger Lakes Fresh, but it takes time to build relationships with the right staff, and to go through all the bureaucratic steps necessary in order to sell to a major buyer like a University (i.e. to get approval from the approved University distributors). But Finger Lakes Fresh is doing what it needs to do in order to supply local food to the large local Universities and is hopeful they will enter those markets very soon. Finger Lakes Fresh wants to be working with 100 local farmers in the near future, and to have a significant impact on the local food system.

Key lessons for MFA: Finger Lakes Fresh started as a hydroponics greenhouse about four years ago, and they already have a lot of brand equity because of that business. Because they are a social enterprise of a successful and long standing nonprofit (focused on job readiness for people with barriers to employment) they were able to find the capital they needed to build an entirely new facility for the food hub (at a cost of \$3 million). Also because of the hydroponic lettuce business, they already had a broad network of distributors whom they could work with to distribute their food hub products. They don't distribute themselves. Steve of Finger Lakes Fresh Food Hub is a firm believer in letting people with trucks continue to transport products. "There are plenty of trucks delivering food, we just need to get more local food on those trucks," he says. It's extremely inefficient for a farmer or even a Food Hub to do their own distribution, and so working with distributors who have the infrastructure already set up just makes sense. Even with their State-of-the-Art facility, it's hard to compete on price with West Coast producers. Steve says that "There are many challenges in the food world—the food system is very complex. It's hard to not lose sleep over fighting with the big guys for wholesale markets." They saved a great deal of money by working with a consultant on setting up the food processing facility. Typically a food processing facility will cost \$300 a square-foot, but they got a lot of used equipment which brought the cost down. Finger Lakes Fresh is unique because of the amount of large-scale processing that they are doing (mashing, cutting, dehydrating, bagging, chopping, packaging), and because they produce a unique product: tortillas made from local grain. Also they are starting their enterprise mainly with products such as apples and cabbage—product that store well and which they can get year-round (so that they aren't dependent on the NY growing season.) If MFA were to decide to scale up its Food Hub enterprise, it would certainly have a lot to learn from the Fingers Lakes Fresh Food Hub.

Sources: Phone interviews with Steve Holzbaur, General Manager, in June/July 2014 (conducted by Claire Stoscheck) and the [Finger Lakes Fresh](#) and [Challenge Industries'](#) web-sites.

QUICK FACTS

- ❖ Category: For-profit farm and incubator.
- ❖ Date founded: 1997.
- ❖ Size of farm land: 19 rural acres (but they've reduced acres in production to eight in order rest the land).
- ❖ Number of staff: Two owners and two full time year round employees.
- ❖ Annual Budget:
~\$200,000 in revenue.
- ❖ Revenue Sources: Winter CSA.
- ❖ Number of participants: Two incubator farmers per year. They require incubator farmers to have one year experience on a production farm coming into the program, and they ask for a one year commitment with an option to extend the commitment. In about 20 years they have trained 90 people (as incubator farmers and interns).
- ❖ Key partners they work with: Unknown.
- ❖ Organization's website:
www.foxtailcsa.com
- ❖ Organizational contact:

FOXTAIL FARMS

Osceola, WI

Mission: To grow good food for people and to train farmers.

Foxtail Farms is a for-profit sole-proprietorship organic farm located in Osceola, WI that also has an incubator program. Foxtail Farms is the only for-profit enterprise that also runs an incubator program that this research has found—making it very unique. Many farms have apprenticeship programs, but typically their focus is more on adding cheap labor to the farm and the secondary focus is a learning environment for the participant. Many farming apprenticeship programs are lacking someone to actually personally mentor a new farmer while that farmer is getting started. However, Foxtail Farms really invests a lot of time and money into its apprentices and incubator farmers, and encourages them to “make their mistakes on someone else’s land” while they’re not going into debt. The reason they do the incubator program is because when they started organic farming it was “just hippies and wierdos” doing it. The owners, Chris and Paul Burkhouse, know that they need more people farming small-scale organically in order to truly have an impact on the food system. Therefore, when people ask them, “aren’t you training your own competition?” they reply that they don’t wish to be stingy with their knowledge, but rather to share it freely and grow the movement. They don’t target any audience in particular for their incubator program, but rather anyone who wants to farm. They get a lot of apprentices off of national food system list serves. The incubator farmers do help Foxtail Farm, because they provide very experienced labor to the farm three days a week, in return for room, board, a few hundred dollars a month, and one acre to grow on in the incubator farm (including equipment and infrastructure). In general, they feel that the food system is not set up where an agricultural business owner can possibly pay enough for labor. So they pay the incubator farmers a little, and make it worth it for people by offering the training, land, equipment and infrastructure at no cost. They also have a beginner farmer training which they call internships. Incubator farmers are required to find their own markets, to not have a CSA while at Foxtail, and to not sell in the Osceola farmers market (as it is already saturated). They also have their own farm names, so that no customer knows that they are on Foxtail Farms. This is important for them in making a name for themselves and building brand equity. Foxtail Farms does not pretend that everything about the incubator program is easy—it can certainly be a strain to have to share equipment, share limited irrigation, and live in close quarters. But it is worth it in order to help train really excellent farmers who succeed. (If they don’t succeed, Paul will be pissed!)

Earned income strategies: Foxtail Farms earns revenue solely from its CSA—which is very successful. They have 300 members and a 90% retention rate. They have challenged the idea that you must buy

California produce in the winter and they have found themselves a unique niche market by offering solely a winter CSA share. This Winter CSA includes eight deliveries from October to April, and it includes fresh vegetables (from the field or hoop house), storage vegetables from the root cellar, and value added products which serve to raise the value of the box. Products such as bread, pie, pesto, etc., made in their commercial kitchen, add value to the CSA box which allows them to only make eight deliveries per year. Their winter CSA is wildly popular—it sold out quickly, and has over a 60 person waiting list (as of July 2014). The CSA is the farm’s sole source of income, and Chris and Paul use that income to pay for the incubator program (along with the labor that the incubator farmers provide). They are a big fan of CSAs—they feel that it would be nearly impossible to bring in the revenue that they currently do through Farmers Markets. Impressively, at their former farms’ location, they used to have an honor-system self-service road side farm stand that brought in \$25,000/year.

Marketing to low income communities: Foxtail Farm doesn’t have a focus on this.

Next steps: Foxtail Farms plans to prove that a Winter CSA is possible and they wish to help shift the idea that you cannot eat locally in the MN winter. They wish that AmeriCorps would get involved in training the next generation of farmers.

Key lessons for MFA: A winter CSA is still a very new thing in MN, and could be a potential niche market for MFA. However, it may require major infrastructure investments such as a root cellar, a walk-in freezer and a commercial kitchen (in order to include value-added items so as to not have to make 16 deliveries in snow banks). Commercial kitchens are capital intensive and only offer razor thin margins, and also require that the people who run them to have a real passion for cooking. Paul emphasized that a commercial kitchen is not a good part-time add-on or a low input way to make money. Also, Foxtail Farm has been able to invest in infrastructure in part because they haven’t invested in machinery (their tractors and other equipment is quite old). The commercial kitchen is a lot of work. However, the kitchen allows Foxtail Farm to offer very attractive and unique products in their CSA (such as breads, soups, humus, pesto, tomato sauce, pickles, and pies) which attracts new customers and also maintains their customer base. The other benefit of the winter CSA is that it allows them to keep less acreage in production (eight acres versus 19) which will help their land rest and regain fertility while controlling weeds with cover crops. It also allows them to spread the work out throughout the year, reducing the insane stress of the summer season. Paul and Chris are proud of their 90% retention rate for CSA members, and state that if customers aren’t coming back, a farmer should ask why not, and ask what they (the farmer) are doing wrong. Paul and Chris came in to the winter CSA 1) because they already had the infrastructure set up for other reasons (a root cellar and a commercial kitchen) and 2) to step out of the way of their incubated farmers, and access the untapped potential for a market in the winter. One of the incubator farmers said that he now farms six acres and 90% of his business is wholesale (he was forced to develop wholesale markets as he wasn’t allowed to have a CSA as an incubator farmer at Foxtail Farm, which he appreciates). He sells to the Minneapolis School District and sees it as an excellent way to make connections—most of his wholesale accounts formed because of relationships he built through selling to the schools. The real value in selling to the school district is in the free publicity (i.e. the former Mayor loved his kale!). More and more the school district will do “opportunity-buys” where they will buy a product and figure out what to do with it (rather than just sticking to the menu planned a year in advance), offering more opportunities for farmers to sell to them.



Sources: A presentation made by Paul Burkhouse at a MOSES farm tour, July 22, 2014, a short personal interview with Chris Burkhouse (conducted by Claire Stoscheck) on the same day, and the Foxtail Farm

QUICK FACTS

- ❖ **Category:** Hybrid incubator, strongly connected to a grower's co-op (that grew out of the incubator).
- ❖ **Date founded:** Non-profit founded in 2010, but farmers started growing long before.
- ❖ **Size of farm land/location:** 10 acres for the incubator farm, another 10-20 from a neighbor rent-free)
- ❖ **Number of staff:** A recent shift in staff structure means they will go down to 2.5 FTE's divided between 5 people. Incubator staff will go down to 5 hours/week.
- ❖ **Annual Budget:** \$216,516 Revenue; \$168,338 expenses (2012 data).
- ❖ **Revenue Sources:** Currently, most revenue comes from their Green Cemetery. In the past they received many USDA and other grants, however, they farmers have decided recently to not apply to a major USDA grant.
- ❖ **Number of farmers/participants:** Nine businesses, 24 adults (as of 2013).
- ❖ **Key partners they work with:** Community Ground Works, WI Department of Agriculture, Trade and Consumer Consumption, Fairshare CSA Coalition, Dane County Cooperative Extension, and many other university and non-profit partners. They focus on partnering with other organizations doing peace and justice work.
- ❖ **Organization's website:**
www.farleycenter.org and
www.springrosegrowerscoop.com

THE LINDA AND GENE FARLEY CENTER FOR PEACE, JUSTICE AND SUSTAINABILITY

Verona, WI

Mission: The Linda and Gene Farley Center for Peace, Justice and Sustainability is dedicated to socially progressive change, community partnership, sustainability and ecological justice.

The Farley Center, in Verona, WI, is a very unique non-profit incubator farm that also works closely with a producer's co-op. It's also unique in the sense that it's very farmer-centric. Farmers have a say in all decisions and define the future of the incubator, staff only "facilitate" (they don't "direct"). The positive side of this organizational set-up is that there is a feeling of great pride in being pillars of their community for the farmers, the farmers have a dedication to growing socially appropriate food that is not always accessible to those who want/need it, they have the pleasure of being their own boss and teaching others, they are able to defray food costs for family and friends, they are bringing in income (in some cases equal to a minimum wage job), and they are using land in an environmentally sensitive way. The other side is that decisions are made by current farmers in the program, and at times the long-term sustainability of the program may not be the number one priority for them—hence the recent decision made by the farmers to not pursue a large grant from the USDA which would have allowed the one incubator staff to continue working. Instead, this staff member will be cut to only five hours and the future of the incubator program is uncertain, especially in regards to its capacity to take in and train new farmers.

Spring Rose Grower's Cooperative: "The four farm businesses that shared land at the Farley Center in 2010 formed a legal cooperative, Spring Rose Growers Cooperative, with help from the UW Center for Cooperatives. The co-op has now expanded to include 8 farm businesses, most owned by minority farmers. This learning and support cooperative utilizes grant funding to provide an intensive technical assistance program. They also have a CSA. They teach free classes in Spanish and Hmong. They are a multicultural, farmer-owned business that grows both diversified vegetables and sustainable farm businesses by integrating traditional practices to bring a fresh selection of produce to our customers."⁴

Earned income strategies: The main source of revenue for the Farley Center is their green cemetery enterprise, Natural Path Sanctuary. It is a nature preserve burial ground, and is the first cemetery in Dane County, Wisconsin that exclusively follows natural/green burial practices—no embalming or vaults and it uses biodegradable containers and shrouds. The cemetery both

⁴ The Linda & Gene Farley Center for Peace, Justice and Sustainability website.
<http://www.farleycenter.org/>

generates income for the incubator program and preserves the land's natural habitat. However, once the plots are all sold this source of revenue will no longer exist. In the past they have also received many grants. The Farley Center farmers sell at farmers markets, to grocery stores and restaurants, to schools, and through two collaborative, multi-farm CSAs. One CSA is managed by the Spring Rose Growers' Cooperative, and the other is managed by the farm incubator. The two CSAs have about 100 members combined.

Marketing to low income communities: Because Farmers Market opportunities are quite saturated in the greater Madison area, the Farley Center has begun to create new markets to reach customers who may not always have access to existing Farmers Markets. Incubator farmers and staff have started farm stands at a Madison WIC clinic and at a VA hospital. One very interesting program is the "Market Share at St. Mary's Hospital Farm Stand" where the Farley Center sells a \$50 punch card in the spring, and then customers can bring the card to the farm stand any week during the season and buy the particular vegetables they would like. Each \$50 card has a \$55 value. The program also works with HMO's to offer up to \$200 of produce at no cost to the customer. This is an interesting hybrid farm-stand/CSA model which has the potential to work well in low-income communities where it is difficult to invest the \$500-600 typical up-front cost of a CSA.

Next steps: As with everything at the Farley Center, the next steps will be up to the Farmers. In 2013 they knew that one goal was to increase the amount of land that the incubator had in order to keep accepting new farmers (there is currently no limit to the number of years a farmer can spend on the farm site). In 2014 the farmers decided to not apply for a major USDA grant which means that the main incubator farm staff's hours will be cut to only five hours a week. Therefore the future of the incubator farm, and its ability to take in new farmers to train, is uncertain.

Key lessons for MFA: In keeping with the Farley Center's social justice and partnership ethics, all decisions about the function and mission of the incubator project are made in collaboration with the farmers. This is unique among incubator programs, but becoming more of a trend. It also means less staff time is required. The Farley Center has a major focus on multi-lingual programs and translation—classes are taught in Spanish and Hmong, and taught by bi-cultural/multi-lingual teachers. They have made a series of YouTube videos about farming practices in Spanish and Hmong. The Farley Center does extensive outreach in the Hmong and Latino communities, not just for recruiting farmers but also for Farley Center staff (however, all Farley Center staff remain white). The nonprofit saves money, and farmers have more ownership, because the farmers decide on infrastructure projects and provide sweat equity to make those improvements. They produce many Asian and Latino crop specialties, and then market to ethnic grocery stores. They have an incubator program Advisory Committee (much like Groundswell does) that includes the nine farmers who are active in the program—so that the program participants themselves can help provide direction for the program. They also have an Advisory Board to the Board which was developed with a different purpose and function than a working board. "It consists of individuals whose work and activities exemplify some of the goals of the Farley Center, and whose advice is wanted and welcomed when requested or they are moved to give it. They help connect the Farley Center mission to a broader understanding of ecological justice. Their name recognition can help others understand what the Center is about."⁵ Another interesting program at the Farley Center is the Land Link program which connects new farmers with available farmland in the Madison area. Every year they hold public "matchmaking mixer" events, bringing together aspiring organic farmers in need of land with farmland owners in the Madison area. Their interpreters facilitate conversations in Hmong, Spanish and English, and the organization provides model leases.⁶

Sources: Farley Center website, the [Spring Rose Growers Cooperative](#)'s website, and [NIFTI's case study of the Farley Center](#) by Meaghan Overton. In addition, Claire Stoscheck interviewed Hilary Otey Wold on July 24, 2014 regarding Hilary's visit to/tour of the Farley Center in July.

⁵ The Linda & Gene Farley Center for Peace, Justice and Sustainability website. <http://www.farleycenter.org/>

⁶ The Linda & Gene Farley Center for Peace, Justice and Sustainability website. <http://www.farleycenter.org/>

QUICK FACTS

- ❖ **Category:** Non-profit, Food Hub-Incubator hybrid (with other programs).
- ❖ **Date founded:** 1988- The Farms Program, Intervale's farm incubator, is the oldest farm incubator project in North America. The Intervale Food Hub started in 2007.
- ❖ **Size of farm land/location:** 170 acres for the incubator farm, 350 acres for the entire Intervale Center.
- ❖ **Number of staff:** One staff for the Incubator, five for the Food Hub (out of 15 for the entire Intervale Center)
- ❖ **Annual Budget:** Intervale in general: \$1,335,754 (2012 info); Farm Program and other activities: 5% of total expenses, so approximately: \$66,787- The Food Hub uses 40% of expenses, or approximately \$534,301.
- ❖ **Revenue Sources:** For the incubator program: fee-for-service (consulting about incubator farms); farm tours; other sources are unknown. Intervale in general (2012 Annual Report): 31% grant revenue; 14% community support; 55% Programs and Program Products.
- ❖ **Number of farmers/participants:** Two incubator farmers, 13 mentors. Approximately 35 farms source to the Intervale Food Hub.
- ❖ **Key partners they work with:** The Incubator- partners are the mentor farmers, & the Intervale Community Farm. Food Hub partners are the 50 "subscription" (or CSA) drop points, and the University of Vermont (through Sodexo, their food service provider).
- ❖ **Organization's website:**
www.intervale.org

INTERVALE CENTER

Burlington, VT

Mission: The Intervale Center's mission is to strengthen community food systems. We accomplish our mission through: New farm incubation, Farm business development, Agricultural market development, Agricultural land stewardship, Food systems research and consulting, and

Intervale's Farms Program is the oldest known incubator farm in the United States, being founded in 1988. Formerly it was focused on conserving land through farming, but now focuses more explicitly on helping farmers develop the business skills they need to build new agricultural enterprises. In 2008, "the Farms Program separated the existing Intervale farms into two categories: mentor farms and incubator farms. Mentor farms have no limit on their land tenure, but they must work with incubator farmers and take on more responsibility. Incubator farms, on the other hand, are limited to 5 years at the Intervale."⁷ The goals of their incubation program are: giving farmers the ability to access land and the chance to form close relationships with others. Intervale also has a Food Hub, called the Intervale Food Hub. It's a local foods market offering year-round delivery. They collaborate with ecological farmers and food processors in their region to provide high quality foods. Their mission is to cultivate a local economy that sustains healthy food, farms, land and people, and they also aim to strengthen the relationship between consumers and farmers. They provide "100% transparency and traceability". The Intervale Food Hub "is committed to their farmers. They offer them a stable market, fair prices and advanced working capital, improving farm viability and quality of life. They also provide ongoing support to the farmers, enabling them to grow more food, diversify production, develop specialty products and push the limits of Vermont's growing season."⁸

Earned income strategies: Intervale doesn't offer a great deal of info about their incubator farm on their web-site, and instead they offer consulting to interested groups (since they are the longest running Incubator farm in the US, it makes a lot of sense for them); they charge fees for services (such as farm tours); also, because the incubator relies heavily on mentor farmers to support new farmers, and the farmers run their own equipment maintenance (through the Farmers Equipment LLC), staff time needed for the program is limited. The operating budget for the incubator is minimal, and Intervale finds that this level of support is comfortable and sustainable in the long-term. Intervale is successful in using these strategies in order to create

⁷ Overton, Meaghan. Farms Program- The Intervale Center, Farm Incubator Case Studies, National Incubator Farm Training Institute, Published by New Entry, 2013. Accessed:

http://nestp.nutrition.tufts.edu/sites/default/files/resources/farm_incubator_case_studies_-_nifti_v2.pdf

⁸ Intervale Food Hub, <http://intervalefoodhub.com/>

a more sustainable program by lessening the task-burden on non-profit staff.

The Farmers Equipment (LLC) is one unique and strategic aspect of Intervale. The farmers buy into this business which owns the equipment and therefore they pay for and manage the infrastructure and equipment themselves, thus removing much of the responsibility from Intervale staff. The Intervale Center has a 40% ownership stake in the business. This shares the risk of equipment break-down and the cost of wear and tear between the farmers and the non-profit. Mentor farms have no limit on their land tenure, but in order to stay on the land they must work with incubator farmers and take on more responsibility in training new farmers.

The Intervale Food sells directly to consumers through weekly "subscriptions"—which is essentially an aggregated CSA that's delivered to 50 locations, and can include non-produce add-on items such as eggs, cheese, yogurt, syrup, etc. The Intervale Food Hub has partnered with University Dining Services at UVM to offer local food subscriptions (CSA shares) combined with the University's system of food points. This flexible model allows students to customize food subscriptions and points to use on campus to meet their personal needs, thus integrating Intervale into the very fabric of the University's meal plans.

Marketing to low income communities: The Intervale Community Farm (ICF), which was essentially the "incubator" of the "Farms Program" at Intervale, is a consumer co-op which provides discounted CSA shares to low-income people. They maintain an internally-funded program that halves the cost of CSA shares for members with qualifying incomes, which serves at least 10% of their membership annually. "Now a 56+-acre consumer owned cooperative farm, ICF is a model for sustainable land management, organic innovation and community involvement. It donates thousands of pounds of produce to the hungry and to Burlington schools each year and works closely with incubator farms and New American farmers."⁹

Next steps: "The Intervale Center is asking big questions as it looks to the future. [The incubator program coordinator] Maggie and the Executive Director of the Intervale Center are currently analyzing the effectiveness of the incubator model in general, and the Farms Program in particular. They hope to use some of the data they've collected throughout the Farms Program's history to determine whether forcing farmers to leave the incubator site is the best model for the Intervale's goals and mission. Maggie mentions that the Intervale Center often gets offers for land, and the Intervale is thinking seriously about whether they should manage a new property, perhaps using a different farmer development model. The Intervale Center is also working on plans for adapting to climate change. These plans are in the beginning stages, but could include taking some fields out of production or changing land use policies to protect the sustainability and health of the Intervale."¹⁰ Intervale is doing some serious thinking about the future, just like MFA, and this might be an excellent time to brainstorm with them.

Key lessons for MFA: Intervale has collaborated with a local tribe to create an indigenous heritage garden. This concept could be an interesting idea for MFA—to not only embrace and celebrate immigrants but also the people indigenous to MN. There is an urban example of an indigenous garden in Minneapolis: [Mashkiki Gitigan](#), aka the 24th Street Community Urban Farm.

It's definitely worth analyzing Intervale's strategies to lower the task burden for staff while increasing ownership, leadership and responsibility for farmer participants, in order to see if those strategies could work for MFA. Both the Farmers' Equipment Cooperative and the Mentorship strategies seem to be very effective. According to Intervale staff, "Intervale is not a training program"; instead, it connects beginning farmers with mentor farmers (who are also leasing land from Intervale). Also, Intervale leaves marketing up to the farmers—i.e. the farmers can sell to the Intervale Hub but there's no guaranteed entry (as is the policy for many incubator farms). The farmers need to approach The Intervale Food Hub as they would any other buyer. The "Farms Program" is quite hands-off, which is likely why they are able to only have one staff member. In addition, they only add two new farmers per year, which is a sustainable rate for them.

Intervale, like the Farley Center, includes farmers in making many decisions. For example, the application process for the Farms Program takes 5-6 months to complete and consists of an incubator staff review, and a fellow farmer review. Then an applicant is required to submit a business plan. Once the business plan is complete, the applicant presents their business plan to the entire Intervale farming community (not just the staff). The farming community provides feedback, and incubator participants are chosen through a community decision-making process. "Instead of farmers relying on the staff, they rely on each other for the most part. In fact, the most frequent communication on the Farms Program incubator site is among participants. Farmers (both mentors and incubators) have close relationships and support one another on a daily basis. Building this farm community is central to the Intervale Center's mission, and helps combat the isolation many beginning farmers experience."¹¹ Finally, the Intervale Center opens up its land for the public to enjoy for recreation, making it a community resource. Once MFA owns its own land, this could be another avenue that MFA could use to fulfil its mission.

Sources: [NIFTI's Case Study about Intervale](#) by Meaghan Overton, as well as the Intervale Website, the [Intervale Community Farm web-site](#) and the [Intervale Food Hub Web-site](#).

⁹ Intervale Community Farm web-site, <http://intervalecommunityfarm.com/>

¹⁰ Overton, Meaghan. Farms Program- The Intervale Center, Farm Incubator Case Studies, National Incubator Farm Training Institute, Published by New Entry, 2013.

Accessed: http://nesfp.nutrition.tufts.edu/sites/default/files/resources/farm_incubator_case_studies_-_nifti_v2.pdf

¹¹ Overton, Meaghan. Farms Program- The Intervale Center, Farm Incubator Case Studies, National Incubator Farm Training Institute, Published by New Entry, 2013.

Accessed: http://nesfp.nutrition.tufts.edu/sites/default/files/resources/farm_incubator_case_studies_-_nifti_v2.pdf

QUICK FACTS

- ❖ Category: Non-profit, Incubator.
- ❖ Date founded: LSS launched New Lands Farm in 2008.
- ❖ Size of farm land/location: Two farm sites (consisting of 5 acres) plus many community gardens.
- ❖ Number of staff: Unknown.
- ❖ Annual Budget: Not available for this particular program. For LSS in general—at a national level for all its locations—it's \$59,812,886.
- ❖ Revenue Sources: For LSS in general: Contributions, gifts, and grants: 2.4% of revenue; Program service revenue 92.3%; gifts in-kind 3.5%; other income 1.8%
- ❖ Number of farmers/participants: In 2013, New Lands Farm provided agricultural opportunities to 119 refugee and immigrant farmers (from Bhutan, Burma, Iraq and other countries).
- ❖ Key partners they work with: For the Go Fresh project they partner with LiveWell Springfield, Common Capital, The City of Springfield, Department of Elder Affairs; Gardening the Community, Partners for a Healthier Community, Springfield Housing Authority and Enterprise Farm.
- ❖ Organization's website: www.lssne.org/newlandsfarm
- ❖ Organizational contact: Shemariah

NEW LANDS FARM COLLECTIVE: A REFUGEE FARMER COLLECTIVE

A Program of Lutheran Social Services (LSS)
Worcester, MA

Mission: to empower new Americans through agricultural projects to honor their food traditions, earn supplemental income, and contribute in a meaningful way to their new community and the local food system.

The New Lands Farm Collective, a program of Lutheran Social Services in Worcester, MA, is working to empower new refugees and celebrate their agricultural/food traditions, while building supplemental income and contributing to the local food system. Lutheran Social Services is working to strengthen communities by empowering people to respond to life's challenges. They envision thriving communities where everyone has the opportunity to achieve their full potential regardless of background or disadvantage. Together with their partners, they work to inspire people to help one another reach beyond their current circumstances and realize new possibilities. Their goal is to assist those in need by: guiding new Americans to self-sufficiency and integration in their new community; increasing access to local, healthy, culturally-appropriate foods; generating supplemental income for new Americans; and empowering emerging farmers.

Earned income strategies: It is not clear from information available what LSS's funding sources are, but for the incubated farmers the earned income comes from the CSA, farm stands, local stores and restaurants.

Marketing to low income communities: The New Lands Farm Collective runs The Go Fresh Mobile Farmer's Market. This mobile market brings healthy locally grown food to underserved neighborhoods in Springfield. The farm-fresh produce is sold for up to 50% off retail prices, to increase availability of fresh vegetable to low-income neighborhoods.

Key lessons for MFA: New Lands Farm Collective's primary focus is on empowering refugee communities. It is part of a very large social service organization, Lutheran Social Services, which receives federal funds to serve refugees. Therefore it brings a social service perspective to its incubator program. Many farmers are reached (they claim 119 farmers in 2013) but a moderate amount of sales were made by all of these farmers (\$40,000). The program seems to work well within the context of a large refugee social service organization as it celebrates refugee's food traditions and agricultural backgrounds. It's notable that it doesn't claim to provide refugees with living wage jobs, rather it just claims to provide supplemental income.

Sources: New Lands Farm Collective web-site; [Lutheran Social Services 2013 annual report](#), Facebook sites for "[Go Fresh Springfield Mobile Farmer's Market](#)" and [New Land Farmers Collective](#).

QUICK FACTS

- ❖ **Category:** Incubator and food hub hybrid; non-profit. Major supplier of Technical Assistance (runs NIFTI).
- ❖ **Date founded:** 1998 (incubator focused on immigrants and refugees) 2005 food hub started, in 2007 the incubator opened up to all new farmers.
- ❖ **Size of farm land/location:** Unknown
- ❖ **Number of staff:** Nine (total for all programs)
- ❖ **Annual Budget:** Not Available.
- ❖ **Revenue Sources:** Earned income through giving Technical Assistance, Grants, USDA, MA Department of Ag., USDA RMA, likely Tufts, etc.
- ❖ **Number of farmers/participants:** 30 farmers in the World PEAS Marketing Cooperative; information on how many farmers in training is unavailable.
- ❖ **Key partners they work with:** The initiative was developed as a broad partnership that includes Tufts University's Friedman School of Nutrition Science and Policy, Boston and Community Teamwork, Inc. (CTI) of Lowell, as key program sponsors. New Entry has many partners which can be [found here](#). Partners listed include MFA, the MA Department of Agriculture, and USDA.
- ❖ **Organization's website:** <http://nesfp.org/>

NEW ENTRY: SUSTAINABLE FARMING PROJECT

Lowell, MA

Mission: "To improve our local and regional food systems by training the next generation of farmers to produce food that is sustainable, nutritious, and culturally-appropriate and making this food accessible to individuals regardless of age, mobility, ethnicity, or socio-economic status. In doing this work, we provide critical training, career development, and economic opportunity to new farmers."

The Agriculture, Food, and Environment Program of the Gerald J. and Dorothy R. Friedman School of Nutrition Science and Policy at Tufts University initiated New Entry, and the project continues to be an integral part of the school's academic program. New Entry is located in Lowell, MA and farmer training is the core of the organization's work. Another primary focus of New Entry is giving technical assistance to other local and national groups. In fact, New Entry runs the National Incubator Farm Training Initiative (NIFTI). NIFTI provides comprehensive one-on-one consulting, educational resources, and professional development opportunities for dozens of organizations throughout North America regarding incubator farms and programming. New Entry partners with MFA through NIFTI, and NIFTI reimburses MFA for giving technical assistance to other groups. The objective of the World PEAS Food Hub, another main project of New Entry, is to help provide a market for incubator graduates: It serves as a flexible, living wage market for limited resource and beginning farmers who have graduated from the New Entry Sustainable Farming Project's Farm Business Planning Course. It aims to build long term economic self-reliance and food security among farmers in eastern MA and their communities, and to expand access of healthy and culturally appropriate foods in underserved areas through production of locally-grown foods.

Earned income strategies: New Entry earns income through giving technical assistance, as well as from grants. Presumably it receives some kind of financial support from Tufts University. The World PEAS Food Hub (which is mainly a CSA, but also has some wholesale accounts) apparently runs at a loss (i.e. produce sales do not cover costs by about \$25,000) and it is subsidized by grants. (The 2013 Annual Report states that "State funds for this project were matched with Federal funds under the Federal-State Marketing Improvement Program of the Agricultural Marketing Service, U.S. Department of Agriculture.")

Marketing to low income communities: New Entry does marketing to low income communities through its World PEAS Food Hub. The World PEAS web-site states that: "In 2012, with the assistance of a Farmer's Market Promotion grant, the World PEAS CSA piloted a SNAP CSA program, which allows individuals receiving SNAP benefits (or who meet income eligibility) to purchase a small CSA share on a week-to-week basis for just \$10 per share. Individuals can pay for this share using SNAP, WIC coupons, Senior Farmer's Market Nutrition coupons, cash, or credit card. The CSA share the members receive is identical to the share offered to our general World PEAS shareholders, but SNAP CSA participants have the option to pay weekly for their subsidized shares, rather than needing to make an upfront investment for the entire season, which would be a sizeable financial barrier for the participation of many low income communities. Last year, over 180 shares were sold to customers through our SNAP CSA program. World PEAS also partners with the Pathfinder emergency homeless shelter in Lowell, distributing the equivalent of 12 CSA shares each week (packed in bulk) to be used for their hot meals program. The Pathfinder shelter shares are subsidized at 50%, which allows the shelter to incorporate fresh fruits and vegetables into their food service. The \$10 sale price for their SNAP CSA is less than half of the actual value of the share (average price is around \$23). This cost difference is subsidized through generous shareholder donations through [their] "Share-A-Share" program. World PEAS also invites CSA members to donate their shares to WIC recipients when they are out of town, and [they] help provide food to youth summer programs, and to elders through Meals-on-Wheels."

Next steps: For World PEAS, according to the 2013 Annual Report: "Rather than concentrating on increasing registration at existing community sites (instead, we are focusing on retention of existing shareholders through quality customer service and consumer engagement), we are looking to expand CSA partnerships with Boston area workplaces. These sites offer a captive audience that can be reached directly through their company's wellness or sustainability working groups, and offer the added convenience for shareholders to simply collect their share at work, rather than making an additional stop to a community pick up location on their way home. This winter, we are in the process of identifying interested restaurant operations, which would receive a product availability list from World PEAS on Friday afternoons and would submit their orders by Monday morning. This would allow our staff and farmers, who generally struggle with the swift turnaround times demanded in restaurant sales, to have another flexible marketing outlet. Additionally, World PEAS is also looking to collaborate with Somerville Public Schools Farm-to-School Initiative."

Key lessons for MFA: New Entry's strength is giving technical assistance to other food projects. They've made a name for themselves and have created NIFTI, and provide many useful materials for free on their web-site. They also are quite involved in broader food systems work, through helping to found Lowell Food Security Coalition, a group that formed to address residents' access to healthier, sustainable food in the City of Lowell, and also by coordinating the Beginning Farmer Network of Massachusetts, a collaborative group of farmers and farm service providers dedicated to beginning farmer success in Massachusetts. They have had great success in getting healthy food to low income communities in a financially sustainable way through their SNAP CSA Program and their "Share-a-Share" program. These strategies are very important to look into as possible options for an organization like MFA, which is seeking to build economic and social justice in the food world. New Entry is very successful in its training, technical assistance and advocacy roles, as well as in its efforts to make local food accessible to low income communities.

Sources for this case study: New Entry website and the [2013 World PEAS Annual](#)

QUICK FACTS

- ❖ Category: Non-profit food hub. (Formerly a LLC. Seeking to become an incubator).
- ❖ Date founded: Land purchased in 2009; CSA began in 2010.
- ❖ Size of farm land/location: Corbin Hill Farm is 95 acres. Only one acre is currently used to produce for the CSA.
- ❖ Number of staff: Six.
- ❖ Annual Budget: Not available.
- ❖ Revenue Sources: CSA shares, grants and wholesale sales. Otherwise, unknown.
- ❖ Number of farmers & participants: Corbin Hill sources from 18 farmers.
- ❖ Key partners they work with: Strategic partners who distribute their produce to low income communities, and those within those communities who are most vulnerable (i.e. small children and homeless people). They partner with Head Start organizations, Food Banks, community centers, schools, churches, garden centers, etc.
- ❖ Organization's website: www.corbinhillfarm.com

CORBIN HILL FOOD PROJECT

Schoharie County & New York City, NY

Mission: "Supplying fresh food ... to the places that need it most."

Corbin Hill Food Project is a network of rural farms and urban communities in New York State. Their primary objective is to provide food access to low income communities. They work with farmers from upstate New York and community groups in New York City to deliver fresh, local produce to Harlem and the Bronx through a CSA. Their Wholesale project is a social venture that delivers fresh, local, sustainably grown produce to groups in Harlem, Washington Heights and the Bronx that seek to improve the health of the communities they serve. Corbin Hill owns a 95-acre farm in Schoharie County in up-state NY, but they are currently only producing on one acre of that farm (they realized after purchasing the farm that many farmers who were already growing in the region wanted to grow for their food hub, so they decided to source from them rather than produce the food themselves). They source vegetables, fruit, eggs and more from a

Corbin Hill's "business model grew out of a sense that, as successful as conventional CSAs are at distributing food directly from farm to consumer, the structure of a CSA is not typically geared toward the financial and logistical needs of very-low-income individuals." [Cohen, Nevin and Derryck, Dennis, [Nonprofit Quarterly](#)]

growing network of farmers in and around Schoharie County who want to share their harvests with New York City residents. They support farms big and small —contributing not only to the economic and physical health of downstate communities, but revitalization of farmland upstate as well.

Earned income strategies: Corbin Hill partners with many community organizations in the Bronx and Harlem (which are considered food desserts) who serve as CSA pick-up sites. These partners help them to find CSA members (because of their pre-existing networks and missions that include increasing access to healthy food). Corbin Hill employs a Community Cook to provide food samples at the CSA pick-ups and a Community Organizer to do outreach and community organizing in the communities surrounding the CSA pick-up sites, thus attracting new customers and making this CSA stand out from others. They also do wholesale selling in order to earn income for the organization. One of Corbin Hill's objectives is to increase the food security and autonomy of its shareholders, and therefore, "it engages nonprofit strategic

partners to provide locally grown and affordable produce to low-income residents of New York City's South Bronx, while also enabling Farm Share members to become equity owners of the farm over time."¹² It is unclear from available

information whether or not Corbin Hill has yet been able to offer equity ownership to its shareholders (also known as CSA members).

Marketing to low income communities: Corbin Hill's primary focus is creating food access for low income and other vulnerable communities who typically don't have access to fresh, organic, local food. According to their web-site, "We partner with organizations that serve the most vulnerable members of our society: the young, the old, and those who are struggling financially and physically. We work specifically with these groups since the people they work with are the ones most in need of high-quality, healthy food — as well as the ones who are least likely to have access to it." They employ community organizers and community cooks in order to improve the experience for their shareholders, to increase their impact and to increase community-building in the low income communities where they distribute food. Unlike other CSAs, Corbin Hill Farm is attuned to issues of food justice: it allows members to pay with Food Stamps. It also has more flexible CSA policies on joining and leaving compared to others around NYC.¹³ Corbin Hill works to keep their prices affordable for their shareholders who are mostly low-income, while at the same time paying fair prices to their farmers. At times they receive grant funding that allows them to offer a "Money Match" to Shareholders at certain income levels. This "Money Match" enables consumers to pay a reduced price for their produce Share and grant funding subsidizes the rest. Corbin Hill caters to low income households by allowing shareholders to pay on a weekly basis instead of requiring them to pay the amount in full at the beginning of the season, which can be a burden for low-income households.

Next steps: Corbin Hill has been in touch with Groundswell (the incubator farm located in Ithaca, NY), in particular because Corbin Hill is interested in starting an incubator farm. An addition, Groundswell and Corbin Hill would like to create an opportunity for the new low-income immigrant and farmers of color in Up-State NY (who are being trained at Groundswell's incubator farm) to sell their food to low income communities of color and immigrant communities in New York City. It has plans to expand how much of its farm it will put into production in the coming years, particularly focusing on berries, which are too costly to purchase from other farms. They are developing a small "kitchen garden" to demonstrate how a small space can be used to produce herbs and vegetables. In the future, the farm will serve as a "learning laboratory that unites upstate and downstate youth through hands-on farming education". As of 2011, Corbin Hill's goal was to have five thousand Shareholders within the next ten years.¹⁴

Key lessons for MFA: Corbin Hill's main focus is to bring healthy food into urban communities that have very limited healthy food options. The project was started by people in those communities, and the founder, Dennis Derryck, gathered 72 percent of the equity to buy the Corbin Hill farm from African Americans and Latinos, and 50 percent from women. Because Dennis Derryck is a professor at the New School in New York City, Corbin Hill also partners closely with the New School to provide opportunities for students. Uniquely, Corbin Hill calls CSA members "Shareholders" in order to help create a sense of ownership. The eventual goal for Corbin Hill is that the shareholders of the produce boxes will eventually become shareholders in the farm and the land itself. They provide community building events—e.g. one time each year Shareholders are invited to travel out to the farm in buses. They accept SNAP and they have a Money Match program that allows low income participants to pay a reduced price. Corbin Hill has some very innovative approaches to getting healthy fresh produce to the communities who most need it—by partnering with community-based organizations, hiring community chefs and community organizers, and by allowing shareholders to pay for their CSA on a weekly basis and use public benefits to purchase the shares. These strategies are very important to look into as possible options for an organization like MFA, which is seeking to build economic justice in the food world.

Sources for this case study: Corbin Hill Web-site, [Corbin Hill Road Farm Share: A Hybrid Food Value Chain in Practice](#), and [Tackling Food Justice at Corbin Hill Farm](#).

¹² Cohen, Nevin and Derryck, Dennis. Corbin Hill Road Farm Share: A Hybrid Food Value Chain in Practice. Nonprofit Quarterly. Originally published in the Journal of Agriculture, Food Systems, and Community Development (JAFSCD), in 2011. Retrieved from <https://nonprofitquarterly.org/management/24197-corbin-hill-road-farm-share-a-hybrid-food-value-chain-in-practice>.

¹³ Goldman, Samantha. Tackling Food Justice at Corbin Hill Farm. Progressive Pupil. April 5, 2014. Retrieved from <http://progressivepupil.wordpress.com/2014/04/05/tackling-food-justice-at-corbin-hill-farm/>

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EXHIBIT C

The environmental scan included the following primary sources: individual interviews (in person and on the phone) and farm tours; as well as the following secondary data: websites, annual reports, data from existing studies/reports and case studies, and news and magazine articles.

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Food Hub Center, National Good Food Network, <http://www.ngfn.org/resources/food-hubs#section-3>. Accessed 8/20/14.

Gutknecht, Dave and Stockinger, Joan. "The Twin Cities Cooperative Local Food System: A Case Study and Commentary." Cooperative Development Services. 2014. <http://www.uwcc.wisc.edu/issues/Topics/TwinCitiesCoopStudy-4-10-14.pdf>.

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The Linda & Gene Farley Center for Peace, Justice and Sustainability website. <http://www.farleycenter.org/>

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Directories to Local Food-Minnesota-Based Directories, Minnesota Institute for Sustainable Agriculture, <http://www.misa.umn.edu/FarmFoodResources/LocalFood/DirectoriestoLocalFood/index.htm>

ⁱ Food Hub Center, National Good Food Network, <http://www.ngfn.org/resources/food-hubs#section-3>. Accessed 8/20/14.

ⁱⁱ Barham, James, Debra Tropp, Kathleen Enterline, Jeff Farbman, John Fisk, and Stacia Kiraly. Regional Food Hub Resource Guide. U.S. Dept. of Agriculture, Agricultural Marketing Service. Washington, DC. April 2012. <http://dx.doi.org/10.9752/MS046.04-2012>.

ⁱⁱⁱ Fischer, M., Hamm, M., Pirog, R., Fisk, J., Farbman, J., & Kiraly, S. Findings of the 2013 National Food Hub Survey. Michigan State University Center for Regional Food Systems & The Wallace Center at Winrock International. September 2013. Retrieved from <http://foodsystems.msu.edu/activities/food-hub-survey>.

Project 9

MN Specialty Crop Block Grant – Federal Fiscal Year 13

FINAL PERFORMANCE REPORT

Submitted by: Gretchen Perbix

E-mail: gretchen.perbix@gmail.com

Date: November 30, 2016

PROJECT TITLE

16. Measuring Minnesota's Emerging Hard Cider Industry

PROJECT SUMMARY

17. *Provide a background for the initial purpose of the project, which includes the specific issue, problem, or need that was addressed by this project.*

The purpose of this project was to measure the state of Minnesota's hard cider industry through annual surveys of the state's hard cider producers. The hard cider market is rapidly expanding nationwide. Production and consumption of hard cider is increasing. The national industry is experiencing massive growth, consolidation, and the launch of new products to meet demand.

Though Minnesota is an apple-growing state, it is not currently well-positioned to meet market demand for locally-produced hard cider. Minnesota's hard cider industry existed in 2013, when this project was proposed, but it was miniscule and faced a number of challenges to its growth.

18. *Establish the motivation for this project by presenting the importance and timeliness of the project.*

Given the project's results over three years, it was both timely and important. In the span of the project, the cider industry's annual growth rate went from 130% to 0%, documenting a rapidly emerging and maturing industry.

19. *If the project built on a previously funded project with the SCBGP or SCBGP-FB describe how this project complimented and enhanced previously completed work.*

N/A

PROJECT APPROACH

20. *Briefly summarize activities performed and tasks performed during the grant period. Whenever possible, describe the work accomplished in both quantitative and qualitative terms. Include the significant results, accomplishments, conclusions and recommendations. Include favorable or unusual developments.*

Over three years, the PI created a survey, distributed it to the state's cider producers, compiled the results, documented them in a report, and circulated the report to stakeholders, which included the Minnesota Department of Agriculture, the Minnesota Apple Growers Association, the Minnesota Farm Winery Association, the Minnesota Fruit and Vegetable Growers Association, and the United States Association of Cider Makers.

The results and subsequent report documented rapid growth of Minnesota's cider industry, growing 130% from year one to year two and 76% from year two to year three.

Now that the cider industry has matured and emerged from its phase of rapid growth, it is possible to understand the economic impact of the cider industry on apple growers. In 2016-2017, cider makers anticipate spending approximately \$750,000 on apple purchases (or juice equivalents).

The results of the survey were presented two years in a row at the Minnesota Fruit and Vegetable Growers Association annual meeting. The overall number of attendees at all project presentations including the Minnesota Fruit and Vegetable Growers Association annual meetings.

For this year was: 100 attendees

For the duration of the grant was: 220 attendees

The results also established an industry-wide need for field trials of cider varieties. In 2016, a Specialty Crop Block Grant was funded toward that end.

21. *Present the significant contributions and role of project partners in the project.*

The project had no partners and was conducted by a single PI. Cider producers in the state cooperated in the survey by participating in it annually.

GOALS AND OUTCOMES ACHIEVED

22. *Supply the activities that were completed in order to achieve the performance goals and measurable outcomes for the project.*

The survey was created and distributed. The results were collected, documented, and distributed.

23. *If outcome measures were long term, summarize the progress that has been made towards achievement.*

None were long term. All were intended to be met within the grant period.

24. *Provide a comparison of actual accomplishments with the goals established for the reporting period.*

Goal: To increase the volume of hard cider produced by craft-scale cidermakers in Minnesota

Accomplishment: The volume of hard cider produced by craft-scale cidermakers in Minnesota has increased.

Goal: To increase the volume of hard cider varieties planted by Minnesota apple growers

Accomplishment: The number of cider variety trees planted by Minnesota apple growers has increased.

Goal: To increase awareness of hard-cider related market opportunities for cidermakers, growers, and other interested parties

Accomplishment: The hard cider industry has been highlighted at organizational meetings of agriculture and horticulture groups; it has also been highlighted in the popular press. The written report was sent via email to individuals associated with the Minnesota Fruit and Vegetable Growers Association, the Minnesota Department of Agriculture, the Minnesota Apple Growers Association, the Minnesota Grape Growers Association, the Minnesota Farm Winery Association, and the Minnesota Cider Guild. The circulation of these associations encompasses all the cider makers and parties directly associated with the production of cider in Minnesota.

25. *Clearly convey completion of achieving outcomes by illustrating baseline data that has been gathered to date and showing the progress toward achieving set targets.*

Goal: To increase the volume of hard cider produced by craft-scale cidermakers in Minnesota

Performance Measure: Increase in gallons produced

Benchmark: Number of gallons produced

Target: 5,000 gallons

Final report: goal was met. Volume increased in excess of 5,000 gallons. In 2013, cider makers were producing 44,000 gallons. In 2016, cider makers produced 180,000 gallons of cider.

Goal: To increase the volume of hard cider varieties planted by Minnesota apple growers

Performance Measure: Increase in trees planted

Benchmark: Number of trees planted

Target: 1,000 trees

Final report: goal was met. Minnesota apple growers have planted over 6,000 trees of cider varieties.

Goal: To increase awareness of hard-cider related market opportunities for cidermakers, growers, and other interested parties

Performance Measure: Increase in published material and public presentations

Benchmark: # of publications and presentations summarizing survey results

Target: 3 per year

Final report: goal was met. The results of the survey were disseminated in print and in presentations. Additionally, its results were also noted in the popular press.

BENEFICIARIES

26. *Provide a description of the groups and other operations that benefited from the completion of this project's accomplishments.*

Apple growers have benefited from the documented need and growth of the cider industry.

Cider makers have benefited from the documented growth of the industry.

Cider makers have benefited in being awarded a grant to conduct field trials of cider varieties.

27. *Clearly state the quantitative data that concerns the beneficiaries affected by the project's accomplishments and/or the potential economic impact of the project.*

Apple growers are aware that in five years, cider makers anticipate spending \$1.5 million on apples (or juice equivalents).

Cider makers have increased production from 44,000 gallons in 2013 to 180,000 gallons in 2016.

Cider makers were awarded a Specialty Crop Block Grant in 2016 titled "Cider Apple Variety Growing Trials."

LESSONS LEARNED

28. *Offer insights into the lessons learned by the project staff as a result of completing this project. This section is meant to illustrate the positive and negative results and conclusions for the project.*

- Since the survey was circulated to such a small group, the response rate was improved by contacting potential participants directly.
- It helped the response rate to illustrate the potential benefits related to formally documenting the industry.
- The survey itself, as well as its results, benefited from having circulated the questions to prospective respondents in advance.

29. *Provide unexpected outcomes or results that were an effect of implementing this project.*

The cidermakers in the state are in the process of formally establishing an organization.

30. *If goals or outcome measures were not achieved, identify and share the lessons learned to help others expedite problem-solving.*

N/A. All goals and outcome measures were achieved.

ADDITIONAL INFORMATION

31. *Provide additional information available (i.e. publications, websites, photographs) that is not applicable to any of the prior sections.*

N/A